Collecting and Propagating Local Development Content

Synthesis and Conclusions

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Report of a project carried out by IICD in association with the Tanzania Commission for Science and Technology and funded by the UK Department for International Development (DFID)

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WHY LOCAL CONTENT?

One of the strengths of new information and communication technologies (ICTs) such as the Internet is the way they can help unlock distant expertise, knowledge and markets. However, this access – usually to 'foreign' content with foreign perspectives – has its limitations. Easier access to globalised knowledge is fast turning us into 'consumers' of distant and potentially irrelevant information. More worrying perhaps, developing countries are being 'invaded' by foreign ideas and values that may undermine or overwhelm local cultural heritage and economic livelihoods.

If we are serious about the use of ICTs as an empowerment tool – so poor people can shape decisions that affect their lives, so they can grasp economic and social opportunities, and so they can deal with misfortunes and disasters, then this foreign content must be matched by the expression and communication of local knowledge that is relevant to local situations. To a large extent, this means that ICTs need to be conveyors of locally relevant messages and information. They need to provide opportunities for local people to interact and communicate with each other, expressing their own ideas, knowledge and culture in their own languages.

This is not an easy task. As this report shows, content does not flow of its own accord; it needs owners or originators with the motivation to create, adapt or exchange it. As well as vision, these pioneers need to have the creative, technical and people skills to transform an idea into something that can be disseminated or exchanged. Moreover, since few of us have all the necessary capacities to create and communicate content, partnerships are essential to get the job done. There need to be very strong incentives for all the elements to come together at the right time and place.

Beyond these critical capacity and incentive issues, local content faces intense competition. Even in remote areas, the powers that 'push' global or just non-local content are often much stronger than those 'pushing' local content. This can be seen in television programming, in advertising, in the spread of global brands, in classrooms using imported curricula and examinations, in the use of foreign languages in schools and universities, in the lowly status of local languages, on the Internet, in research, in the dissemination of 'reliable' scientific information, and even in the reliance on foreign technical assistance. With a few exceptions (phones, community radio, or indigenous knowledge systems), most formal content and communication 'channels' in developing countries help to push 'external' content into local communities. Counter efforts to push local content on to global stages, such as African film, African research publications, 'southern voices' in the media, or the e-trading of crafts face an uphill struggle.

In a search for ways to promote local content, we have few guidelines to follow. Should we create more effective 'push' mechanisms, increasing and improving the supply of content? Should we focus on the demand side, so that local content is more highly valued? Should we look at the containers in which content is packaged, making them more attractive and accessible? Should different content types get different treatment?

Drawing from a consultation process to examine how local content in developing countries is created, adapted, and exchanged, this report provides some answers to these questions. It is a synthesis of lessons; the case stories reproduced in a companion report provide details on actual experiences and lessons from the ground.

Summary of Conclusions

First, a definition of local content is difficult to find. Some people define it as content for people in a certain locality, or content for people speaking a language or for people from a cultural tradition. Others suggest it is content that is relevant to, or consumed by a given society or community. In the media industry, local content refers to the proportion of programming that is not imported. In this study, we propose that **local content is the expression of the locally owned and adapted knowledge of a community** – where the community is defined by its location, culture, language, or area of interest.

Second, while the importance of 'local content' has often been raised in international meetings, concrete initiatives and expertise on this topic are scarce.

Third, in the course of this study, contacts were established with people working in most development sectors and representing public, private and not for profit groups. Similarly, efforts were made to link up with different media traditions. The underlying issues and challenges are a core interest of people in many disciplines and sectors.

Fourth, it is crucial to differentiate between 'local content' and local 'eContent'. Just because little eContent from developing countries is found on the Internet, it is wrong to conclude that there is a 'local content' problem. Most local content is invisible to international audiences that are not connected to local 'offline' content channels.

Fifth, while the ICTs and other media are converging and provide many opportunities to strengthen local content creation and exchange, different 'pools' of local content need to be treated very differently. The 'drivers' and motivations in health are not the same as those in agriculture, community development, or community radio. A good understanding of these is necessary before any interventions are formulated.

Sixth, while everyone is impressed by the potentials the new ICTs offer to share and exchange local content, in many cases the 'new' technologies are tape recorders, radio, television, newspapers, or telephones. ICTs and the Internet are currently rather small parts of the 'toolkit' used to create and communicate local content.

Seventh, most content initiatives using ICTs tend to 'push' external content towards local people. In other words, they mainly provide 'access' to other people's knowledge. With a few exceptions, new technologies are not used to strengthen the 'push' of local content from local people. Generally, the balance between 'push' and 'pull' – or supply and demand – is heavily weighted towards non-local rather than local content.

Summary of Priorities

In general, we should not assume that a lack of visible local content in digital forms is a problem. Nor should we assume that local content always needs to be shared beyond its community of origin, or that digital media are always the most appropriate solution. A large part of the 'local content' problem in developing countries has little to do with ICTs – it is more about the way people value their own culture, traditions, and languages. It is also about local capacity limitations and the way global content is pushed. It is linked with local and global market forces.

What do we need to do?

To stimulate all kinds of local content expression for local application and use.
To stimulate eContent creation and communication for local and global use.
To develop eContent exchange and broadcast systems.
To strengthen the 'synthesis and adaptation' capacities of organisations working with both 'global' and 'local' content.

These can be achieved by actions directed towards: Valuing local content, motivating local content, making local content visible, addressing local language issues, connecting with traditional knowledge, building local adaptation skills, engaging in joint action, promoting local ownership and participation, and by strengthening the local skills base.

This is a large agenda and the local content 'landscape' is huge. What are some concrete directions that we can follow?

First, and perhaps most challenging, **invest resources in a wide spectrum of local initiatives that create or communicate genuine local content**. The value of local knowledge needs to be pushed, the creativity of local communities and institutions needs to be mobilised, and local capacities need to be built up. This calls for many interventions, clustered around high priority sectors like health, education, rural livelihoods and the environment, and involving a wide range of actors. As is argued by many people working at this level, 'local-to-local' communication, often using various forms of communication, is more important than use of the Internet per se.

Almost any kind of content is suitable, as is almost any kind of information and communication medium (though mixtures seem to be most effective). Most important is that it contributes to the fight against local poverty – by boosting local livelihood opportunities, by empowering people to shape decisions that affect their lives, and by attacking disease, hunger, and destruction of the environment. We should not overlook the contributions of entertainment and culture to a better or more bearable quality of life.

Second, **work with existing eContent, networking producers and intermediaries to exchange and deliver development-oriented content**. Located somewhere between the communities and individuals with their local content and wider 'global' pools of knowledge, an Open Knowledge Network may channel development content to local and community access centres. Such a network will absolutely require that the local content efforts of the local communities are creative, dynamic and productive. Such an effort has an important mobilising or catalysing role, providing a critical mass and drive that many local initiatives can cluster around and feed off in a symbiotic way.

Third, examine ways to **provide incentive financing for local content**. Borrowing from the 'script pitching' notions in the African television and film sector, owners of local content can be linked with content producers and financiers. Organised in a series of workshops at the local, regional, and continental level, local content project proposals can be 'pitched' and winners selected for financing or to receive other prizes. In a simple form, such an initiative might simply provide prizes and some funding for digital content development ideas.

THIS STUDY

This report was commissioned by the United Kingdom Department for International Development (DFID) to explore how action point 8 of the DOT Force Plan of Action could be implemented (see box).

The DOT Force report, and many others, point to local content development as being critical to the local appropriation of ICTs for development purposes.

However, they give little insight into exactly what content, for what purposes, and with what expected development impacts. Nor do they indicate how exactly the processes of local content creation, adaptation, and sharing can best be supported.

This report resulted from a consultation exercise to examine and illustrate how local content in developing countries is created, adapted, and exchanged. It draws from 60+ case stories, analyses prepared by partners, and a workshop held in Tanzania in March 2002. A preliminary 'taxonomy' and working definition of local content is presented and discussed in relation to the various types of local content and people's motivations to share it. Some steps to be taken to support and promote local content are suggested.

Action Point 8
National and International Effort to Support Local Content and Applications Creation

Encourage the software community, including the open source and commercial software communities, to develop applications relevant to developing countries, to make its software available to such countries and localize software applications, while at the same time helping to promote the growth of local application development capacity in these countries;

Encourage local content development, translation and/or adaptation in developing countries to fulfill the needs of learners, scholars, professionals, and citizens for education, learning, training and application development, including provision of online access;

Support national and international programs for digitizing and putting public content online, focusing on multilingual applications and local heritage;

Support participation by local stakeholders in setting technical standards for incorporating local languages in ICT applications;

Encourage networking of bodies that acquire, adapt and distribute content on a non-commercial basis;

Encourage commercial publishers to explore possible business models to enhance greater accessibility for poor people to relevant content;

Encourage the full participation of developing countries in the WIPO.

For more information, see: www.dotforce.org

In line with the 'biodiversity' perspective adopted, a broad approach was followed in which many different types of content and eContent were looked at as well as many old, new, and traditional media and ICTs.

DEFINING LOCAL CONTENT

An immediate challenge we face in this area is to define local content. This proved to be extremely difficult. Partly this may be due to the wide use of the term 'local content' by various groups each, with a slightly different interpretation. It is also partly because, despite the many calls that increased attention be given to local content, in reality there is a tiny and dispersed knowledge base on local content and few people are actually working on these issues. This issue is complicated further when we take note of one participant's suggestion at the workshop that most content on the Internet is actually the 'local content' of countries like the United States.

It seems simple and obvious that content can be defined as local when it is produced in a specified geographic locality, such as a village, province, or even a country or continent. The problem with this definition is that information from a locality does not always have a relation to the people living in that place. Especially in a globalising world, content produced in India may not be Indian at all, but simply cheaper to package in India than elsewhere. Similarly, it is debatable how many of the products from 'field' research carried out in developing countries can actually be considered as local.

Some people therefore define local content as content that is intended for a specific local audience, as defined by its geographic location, culture or its language. Thus, Colle and Roman in a recent study consider local content to "broadly mean the processing and diffusion of information customized in any suitable format to fit the needs of a specific community." The problem here is that much of the content received by an audience may actually originate 'outside' the local community. While a community of Kiswahili speakers may receive information in their language, much of the content is likely to be external. It is targeted to their needs. Similarly, villagers in northern Tanzania may see television broadcast from Dar es Salaam, but this does not make it their local content. Not all content intended for an audience may therefore be considered as 'local.'

Others prefer the notion of relevance suggesting that local content is content that is socially, culturally, economically, and politically relevant to a given society. Again, this is a rather broad definition that would allow, for instance, any 'relevant' news from the BBC, CNN or the Internet to be considered as 'local' content. Besides which, the notion of 'relevance' and its definition is a minefield for disputes. What is local content then? Some define it as content for people in a certain locality, or content for people speaking a language or representing a certain cultural tradition. Others suggest it is content that is relevant to, or consumed by a given society or community. In the media industry, local content normally refers to the proportion of programming that is not imported. All of these definitions are valid. They also have serious drawbacks in that much that is 'non-local' can creep in, making a clear focus on 'local content' almost impossible.

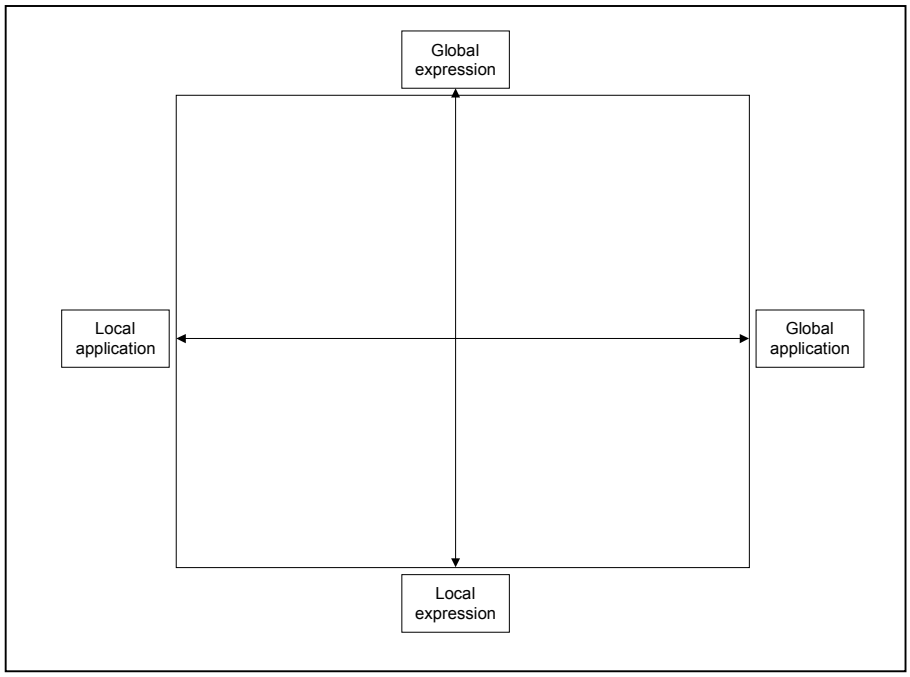
To help us advance, we need to adjust our perspective. Instead of seeing local content as content 'for' local communities, we need to see it as content 'from' local communities. In the Dar es Salaam workshop, participants decided on the following working definition: **Local content is the expression of the locally owned and adapted knowledge of a community – where the community is defined by its location, culture, language, or area of interest**.

This means that local content is not something that is broadcast to or necessarily used by members of a defined community, although this is not excluded. It includes any external or global content that has been transformed, adapted and assimilated into the knowledge base of the community. Local content is exchanged and shared, locally or globally, in various formats, packages and media. When it is disseminated and is accessible using digital means, it can be termed 'eContent'.

A LOCAL CONTENT 'TAXONOMY'

During the workshop in Tanzania, participants wrestled with definitions of local content and brainstormed ways to characterise or categorise different approaches to content generation, adaptation and communication. Arising from the discussions, a simple grid comprising two axes was developed as an analytical and discussion tool (see below). The axes distinguish between the 'expression' of content (its generation, adaptation, etc) on the one hand, and the 'application' of content on the other. Each has a global and a local end.

Using the grid, the main locations and flows of local content initiatives can be plotted and discussed (see next page for some illustrations). This results in some interesting trends.



First, that the 'northeast' quadrant with its global content for global applications is not very interesting from a local content perspective. It is the source of much of the content that is said to be 'invading' poor countries. More positively, it is the centre of international information exchange efforts that draw on local content from all sources to address global issues.

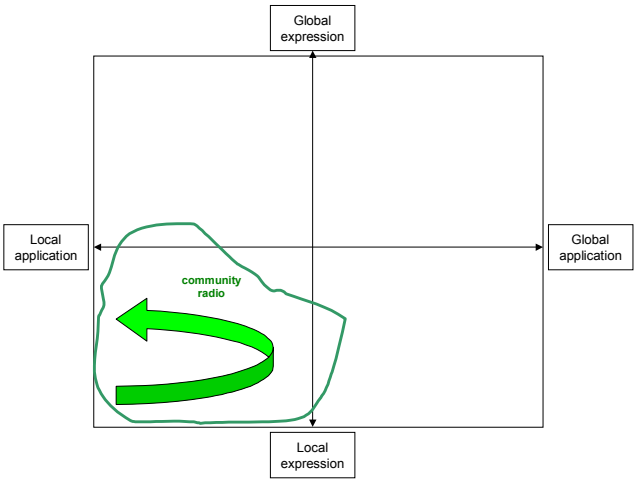
Second, the 'southwest' quadrant is where the expression of local content for local application/ consumption is most concentrated. It is also where, as one moves southwest, content becomes more and more person-to-person, oral, audio, video, and non-digital. For many people this is the critical quadrant where digital 'divides' need to be addressed. Here we find most community radio and indigenous knowledge initiatives as well as all kinds of local community empowerment using traditional media like storytelling and action theatre. **The key challenge for actors in this quadrant is 'local ownership'** of the content as well as the processes to express it.

Third, the 'northwest' quadrant is a very busy zone in which most development agencies as well as many local organisations are most active. They seek to bring relevant and reliable global (or external) information to local communities. One major problem is that international 'pushers' of information often focus on the end-user, ignoring the vital role of local intermediaries. Intermediaries are vital if external information is to be locally adapted and assimilated. Most content in sectors like health and education is located here as well as efforts to provide local access to international information sources like journals. **The key challenge for actors in this quadrant is 'adaptation and synthesis'** - so that the external content is translated, transformed, and adjusted to suit local situations.

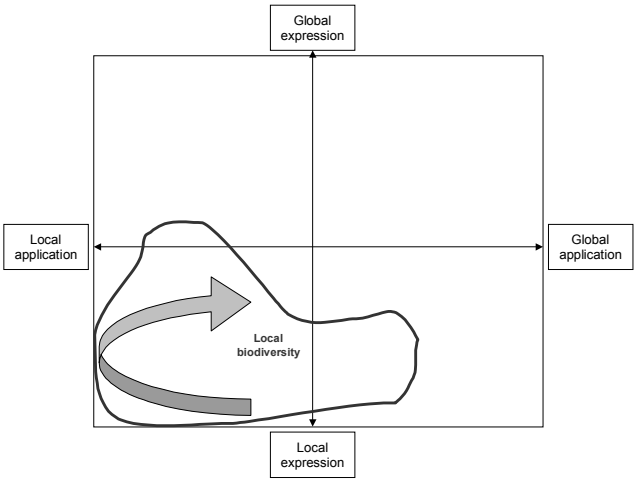
Fourth, the 'southeast' quadrant is probably the source of most DOT Force and international concerns as it represents the flow of locally expressed content towards global audiences. Here is where efforts to mobilise 'southern voices' are found, as well as e-commerce efforts of all kinds that seek to sell local arts, crafts, and music to global audiences. Creating digital anthologies or disseminating local research results to international audiences is also in this quadrant. Translation from local contexts and languages is critical. This is where eContent from developing countries is expected to make a mark and where its relative absence has led to calls for more 'local content.' **The key challenge for actors in this quadrant is the 'visibility'** of the local content to external local and global 'consumers.'

The four examples below illustrate these differences.

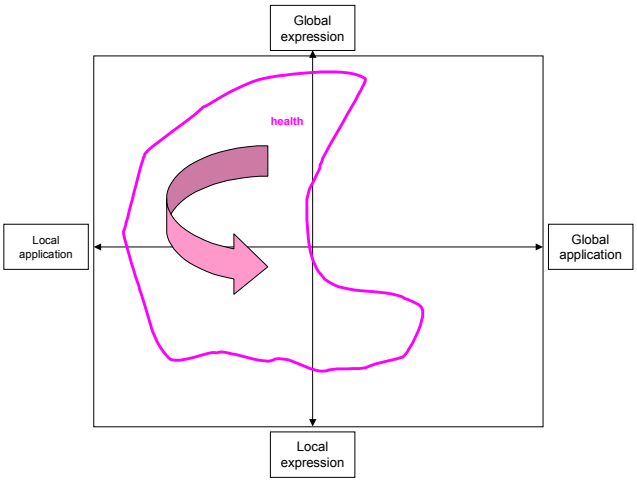
A **community radio grid**, drawing on case stories from South Africa, Nigeria, Sri Lanka, and Nepal, shows a domain in which locally expressed content dominates. While some content comes in from external sources, the community itself and especially the volunteer workers are the key informants and communicators. The overall direction of flow is to the west; outside audiences – to the east – are not seen as important consumers of the local content. Here, language is not a major issue as most communication and content exchange is within a community that largely speaks the same language.



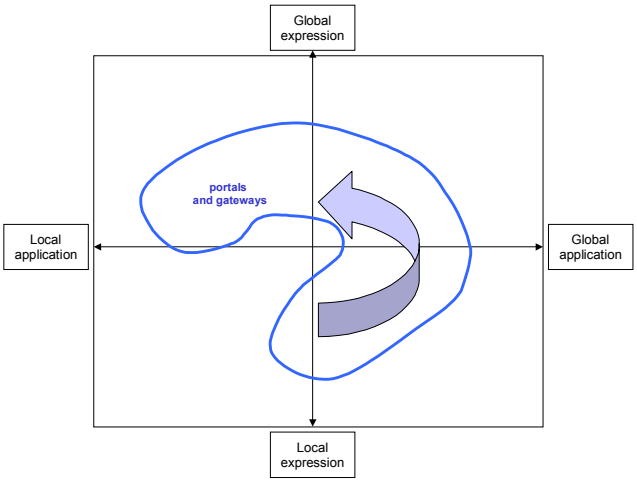
The **local biodiversity grid**, drawing on case stories from Kenya, Nepal, Malaysia, and China, again shows a domain in which local expression dominates. However, unlike the community radio projects, these efforts deliberately also look beyond the immediate community for audiences. Preserving traditional knowledge is important. But, at the same time, this knowledge is critical to the sustainability of local and national livelihoods. Hence, the community biodiversity centres and 'indigenous knowledge newsletters' also record, guard and disseminate this content so that national and world science as well as other communities may benefit. Thus the flow is from west to east.



The **health grid**, drawing on case stories from Ghana, Kenya, Uganda, Nigeria, Bangladesh, Cambodia, Mexico, Tanzania, and South Africa, shows a domain in which reliable generic health messages are adapted into local content by local intermediaries and health information providers. The interface with traditional content of, for example, local healers is weak and healthcare workers largely look to external content for their information needs. The flow is from north to south and then east as new local content emerges from local research and other transformation processes to be fed across to global audiences.



The **portals and gateways grid**, drawing on various African case stories as well as the activities of groups like UNESCO, OneWorld, the Worldspace Foundation, Sangonet, and the World Bank, shows a domain in which local eContent is mobilised and aggregated at different levels so it can be downloaded for local use. The difference between this domain and the health domain lies in the explicit search for 'local' content that is is suitable for wider dissemination. The flow is from south to east towards global applications, then north and west where it forms part of the 'global' content available for local adaptation.



Of course these are quite general categories and exceptions in each case can always be found. Nevertheless, the general trends were accepted in the Dar es Salaam workshop as being a good basis for discussion and perhaps some re-thinking of priorities.

Push and Pull

Another use of the grid is to assess the directions and strengths of content supply and demand.

Strong global 'push.' At present, the strongest 'push' is from northwest to southwest where we can see local communities targeted to receive and consume mainly external and global content. In recent years, this flow has been increased and accelerated by new ICTs, the Internet, and aggressive global media concerns. The, for most users, mainly one-way flow of Worldspace content is a classic example

where organisations mainly located in the North are increasing the supply of content for local downloading. Some UNESCO efforts, like the local content anthologies, also act in this way. Similarly, community radio stations like those in South Africa are also 'targets' for content made available by groups like AMARC or Panos. These projects also try to source and re-disseminate content from organisations in the South. They are not alone. Almost every development agency mission includes dissemination of information to people in developing countries. Despite there being quite a strong local 'pull' for this content, for example in the health sector where almost all the cases identified inadequate access to world medical knowledge as a major constraint, the local relevance of much of this global content is often questioned – in other words, some of it is vitally relevant, but much of it isn't. In addition, the capacities of local communities to absorb and effectively use it are rather weak.

Weak local 'push.' The corresponding 'push' of local content is much weaker, both in quantitative and qualitative terms. This seems to be partly due to local capacity limitations. It also results from the strong competition provided by the global content sources and a relatively weak local 'pull' or appreciation for local content. External and foreign language content is often considered to be superior to local equivalents and its mastery often opens doors to employment and opportunity. Thus, despite local content quotas, much television programming in Africa relies on imported content. Investing in local content does not seem to pay. Initiatives that are closer to their communities, such as the radio listening clubs, the indigenous knowledge activities in Kenya, Malaysia and Nepal, and community radio stations as well as communication formats like drama and storytelling do however seem to be successful in 'pushing' local content. More generally, there is a growing global demand (from the east of the grid) for certain types of local content, as evidenced by the DOT Force interest in this topic. Thus the African Journals Online (AJOL) project provides a platform for local research to be published. UNESCO's digital anthology projects are collecting and distributing local grey literature, and the Africa Pulse and Tanzania Online portals provide spaces for local eContent. The strength of this 'pull' and its ability to significantly support and stimulate local content in ways that are sustainable are not yet clear.

So where should we focus our efforts? It is hardly likely that development agencies will support efforts to reduce their 'push', to cut their information support for poor countries. It is the main reason why many of them exist.

Perhaps **the 'pushers' need to better stream and channel their content,** working with and through local 'infomediaries' to make it more accessible and demand-responsive. The Open Knowledge Network (OKN) proposal of OneWorld moves in this direction. Various other forms can be found in the health and agriculture sectors where local intermediaries, such as the Health Foundation of Ghana, are re-packaging and disseminating different types of global information for local use. These intermediaries are critical, particularly in 'north-south' efforts where, for instance, international organisations try themselves to get health information directly to end-users, often ignoring or bypassing the local repackagers (who are in a much better position to meet local end-user needs). Finally, multi-agency thematic and regional portals and joint ventures – like Africa Pulse in Southern Africa – also serve to bring scattered information together and perhaps even to rationalise its production in the first place.

We can also **strengthen local capacities to 'pull' and target content** so that it better satisfies local needs. This especially means building up the capacities of local 'infomediaries' to effectively act as brokers between local and global efforts. The AfriAfya project in Kenya illustrates how local actors in the health sector are combining efforts to do this more effectively. Many development agencies are also active here as exemplified by groups contacted in this study like Healthlink Worldwide, INASP, IPGRI, UNESCO and the Dreyfus Health Foundation.

A critical dimension is to focus on ways to **strengthen the local 'push'**, to find ways to build up and extend what already exists in a community. This means focusing on both digital and non-digital content. Focusing in the southwest quadrant, local content for local purposes can be stimulated, as the

indigenous knowledge supporters in Kenya, Malaysia, China, and Nepal are doing and as UNESCO is supporting in Uganda and in the Pacific. We can also enhance the flow of local content intended for external use. Such mainstreaming of local content (or 'southern voices') into global flows is already a significant activity of groups like Panos and OneWorld, as well as e-business ventures like Peoplink. Needless to say, stimulating the local and global 'pull' for local content is essential. Local content creators and communicators need appropriate motivations and incentives as well as 'markets' for their ideas and products.

Here, we may want to concentrate on certain types of content that are threatened, under-represented, or provide greater local ownership and opportunities. Examples of this are traditional medical knowledge, community radio, knowledge of useful plant species, and local language film and audio programming. In most cases, these need both 'pushing' and 'pulling' if they are to compete or even to survive at all.

These are the kinds of choices that communities and countries need to make for themselves. They are already being made, often without anyone realising. The loser, so far, is often the local community or entrepreneur whose local knowledge, if it is expressed at all, is shaded out by high-tech, high-cost, and slickly packaged global content.

CONCLUSIONS – ISSUES AND LESSONS

Before presenting some recommendations and future directions, it is useful to review some of the main trends and lessons emerging from this analysis. These have significant implications both for the way in which we regard local content and for how support can be channelled in the future.

While the importance of 'local content' has often been raised in international meetings, concrete initiatives and expertise on this topic are very hard to find. Undoubtedly, there are huge amounts of 'local content' in developing countries and millions of people are busy working with it. And many development projects directly or indirectly work towards the generation and exchange of even more. Nevertheless, documented examples of processes of content generation and exchange are exceedingly scarce. Two sectors stand out as being different in this regard.

First, a relatively small but widespread 'indigenous knowledge' community has been working on these issues for several years now, focusing on the documentation of traditional knowledge and its transmission to future generations. Members of this community argue that local knowledge is usually the only asset that poor people actually own. Second, the term 'local content' also frequently appears in the media sector, where countries are setting local content quotas for film, television, and radio. Both experiences are pertinent to the discussion in this paper, but neither capture the whole picture.

During this study, contacts were established with people working in almost every development sector and representing public, private and not-for-profit groups. All readily identified local content or local knowledge and its mobilisation as a key challenge. Similarly, efforts were made to link up with different media traditions – film, television, video, radio, community radio, art, scientific and educational publishing, newspapers, community theatre and action learning, libraries, storytelling, development communication, as well as Internet and other ICTs. Again, getting good local content emerged as a shared interest quite independent of ongoing 'digital divide' discussions. The underlying issues and challenges are a core interest of people in many disciplines and sectors. These people are increasingly united by a growing awareness of the potentials - and threats - posed by the new ICTs.

It is crucial to differentiate between 'local content' and local 'eContent'. Just because little local eContent can be found on the Internet or in other digital forms in developing countries, it is wrong to conclude that there is a 'local content' problem. Most local content is simply invisible to international audiences that are 'unconnected' to local non-digital content channels. This poses a different sort of connectivity problem! In reality, there are vast amounts of local content scattered in every developing country community; it is not digitised and even if it were, it may not always be desirable that it be disseminated outside the community where it originates. Generating local eContent poses many challenges, not least to master the technologies. Generating and exchanging local content poses different, though sometimes related, challenges. Both can learn from the other. Both are necessary.

While the ICTs and other media are converging and provide many opportunities to strengthen local content creation and exchange, different 'pools' of local content need to be treated very differently. The 'drivers' and motivations in health are not the same as those in agriculture or community development and a good understanding of these will be necessary before formulating different interventions.

Thus, the many case stories from the health sector show that it is currently focused around providing better local access to reliable generic content. This may in turn be re-packaged, translated and internalised to re-appear as local content. The interface between global and local is crucial and many

initiatives in this area aim to bring global knowledge into the hands of local health care workers. On the other hand, as the Nigerian case from the Fantsuam Foundation illustrates, local indigenous or traditional medical/health knowledge is locally very important and has its own knowledge flows and actors operating alongside 'western' medical science.

The indigenous knowledge/biodiversity world is the opposite. Here, the urgent challenge is to ensure that the 'non-scientific' know-how of local people is documented and passed on, mainly to very local audiences, in local languages. The local interfaces are currently the most crucial. For these people, the outside word, as an audience or even as a market, is growing in importance as indigenous peoples begin to connect with each other. This may evolve even more rapidly as the local communities discover the value of their knowledge and learn how to capitalise on it.

Education is close to health; agriculture has global elements but has long been moving towards the biodiversity side with its focus on farmer knowledge and local agro-ecological conditions.

Community and local radio are firmly in the local sphere. As the case stories from South Africa, Nigeria and Nepal indicate, it looks far more 'inside' the community for its content, language, and sustainability, especially when compared to commercial or government radio stations. Most television and film is firmly 'global', despite efforts by UNESCO and others to stimulate local productions of local content. Local music seems to face similar problems, despite the success of some world music on the world stage. As the case stories from Peoplink and Gamos indicate, e-business or e-commerce based on real local content for global markets has a long way to go (unless it is local people providing international e-services like call centres or desktop publishing that use mainly non-local content). Apocryphal e-commerce stories like the purchasing of goats in Ethiopia via the Internet are perfect examples of 'local to local' content exchange within a community whose members, although geographically spread, share a common language and culture.

There is no single driver underpinning the creation of local content, especially in digital formats. Out of a very complex situation, five 'spheres' may be identified, each with its own reasoning and concerns. Each has its own approach to local content.

- A 'geo-political-economic' sphere sees local content as a matter of national image and economic development. Concerned by, for instance, the negative image of Africa on the world media, local content is needed to convey accurate and positive images. The result should be increased foreign investment, tourist arrivals and perhaps greater self-confidence and influence in global forums. Mixed up with this is a desire to develop competitive local media and ICT industries or sectors that can stimulate local jobs and provide local livelihoods. It means developing content, perhaps local content, for regional as well as global markets and audiences. The public sector is concerned with the first; the private sector is expected to drive the second, perhaps with public support.

- A 'geo-heritage' sphere sees local content as an expression or a record of local cultural, social, and natural heritage. The urge is to conserve and preserve it for future generations, and perhaps as a way to provide local livelihoods. Here, the actors are almost all public or voluntary – museums, archives, galleries, research organisations, academia, NGO's and the like. Educational content is important alongside the concern for preservation.

- A 'public-social' sphere is most concerned with local content as a tool for development – to empower individuals, to improve livelihoods, to provide opportunities, to cope with disaster and poverty, and to govern effectively. Local content is developed for use by the public sector so it

can achieve its objectives; other development actors such as NGOs also foster content in areas like health, human and social rights, and governance. Here the content is almost all in the public domain, provided as a public good that anyone can draw on.

- A 'commercial' sphere is most concerned with local content as a way to sell services and products, for profit, to local or foreign markets. Mainly private sector, a large part of this content is 'infotainment' that seeks to inform and entertain and, to some extent, to educate. Despite local content quotas in the media, much of this content is imported. A smaller content area is based around local business and commercial trends and conditions, prices, etc. that are of interest to local and foreign markets. In some sectors, like tourism, this local knowledge is the 'added value' offered by local companies.

- Finally, in the 'individual' sphere, the focus is on communication among people, sharing ideas, information on opportunities, advice and gossip with each other.

While everyone is impressed by the potentials the new ICTs offer to share and exchange local content, often the 'new' technologies are tape recorders, radio, television, newspapers, or telephones. **ICTs and the Internet are currently rather small parts of the 'toolkit' used to create and communicate local content**. Their use is certainly growing. However, the more 'local' a situation is, the more likely it is that person to person communication processes are more important than the production and exchange of content 'artefacts'. As one correspondent argued: "local content in the rural, developing country context is primarily voice content or text based email - people speaking to one another over the phone, friends communicating by email - difficult to track what is being said and to whom, difficult to point to in terms of visible success stories and websites." Generally, as one moves away from local (and predominantly voice or visual) situations, people tend to come into contact with various types of content packaged to achieve specific commercial, educational, social, or entertainment purposes.

Most content initiatives using ICTs tend to 'push' external content towards local people. In other words, the ICTs are seen mainly as providing 'access' to other people's knowledge. With a few exceptions, new technologies are hardly being used to strengthen the 'push' of local content from local people. In general terms, the balance between 'push' and 'pull' – or supply and demand – is heavily weighted towards 'non-local' rather than local content.

RECOMMENDATIONS

First of all, we should not assume that a lack of visible local content in digital forms is necessarily a problem. Most local content is in non-digital formats, often for good reason. Storytelling, traditional drama, and fairs of all kinds are effective forms of local communication that may also carry important social messages, regarding health care or community development for example. Similarly, all local content does not need to be shared beyond its community of origin. Traditional health practices in Nigeria are very tied to specific local cultures and wide dissemination may not benefit anyone. In such cases, guarding local ownership and conserving the specific context in which local knowledge has been expressed are critical elements to be addressed.

A large part of the 'local content' problem in developing countries has little to do with ICTs – it is more about the way people value their own culture, traditions, and languages, as well as those of others. It is also about local capacity limitations and the way global content is pushed. It is linked with local and global market forces.

Participants in the Dar es Salaam workshop agreed that, when looking at ICTs and local content, the 'usual suspects' need to be in place – an enabling policy environment, accessible infrastructure, and finance. More than these though, we need to look at the 'push' and 'pull' factors, re-balancing them to give more weight to local content.

Governments have an especially important role to play – in nurturing and fostering appropriate local content, by providing the correct mix of incentives, and by fostering local languages and cultures. Local content needs to be more seriously mainstreamed into national e-strategies and ICT policies that currently focus more on access, capacities, and connectivity. And, since relatively little is known about ways to energise local content creation and sharing, different initiatives and approaches need to be tried and supported in different sectors and environments.

Priority Actions

If we look again at our grid, four main areas of action can be identified:

1. **Stimulate local content expression for local application and use**

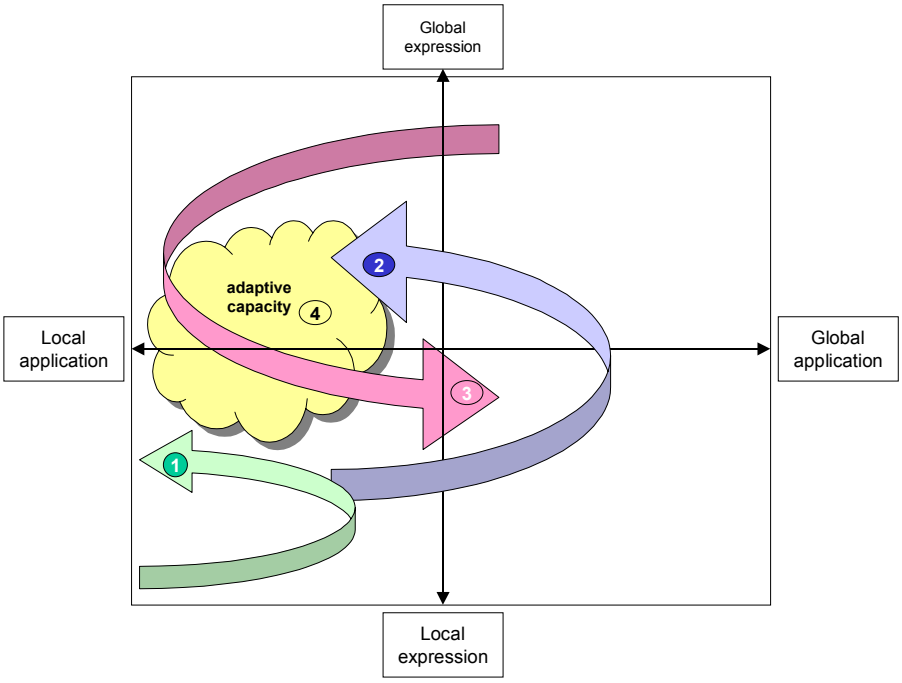
   The emphasis need not be limited to eContent and digital media. Here we want to increase the 'pull' – or demand for local content – and introduce 'push' measures that enhance the supply of local content for whatever particular local uses there may be. We should note here that local content intended for local use is often of value beyond the immediate community. Thus, a manual produced in Kenya for Kenyan village health workers on the treatment of severe childhood illness may well be very valuable, with adaptation, to village health workers in Uganda.

2. **Stimulate eContent creation and communication for local and global use**

   While more local content in any format is useful, where appropriate this needs to also migrate to digital formats. It can be shared across different media platforms, it can help to 'balance' the flow of external ideas with local experience, and it reinforces the livelihoods of its owners. Here we want to enhance the local 'push' for local eContent so it reaches potential local and external audiences.

3. **Develop eContent exchange and broadcast systems**

Particularly in the public, educational, and social domains, relevant global and local content is scattered and of mixed quality. Before it is streamed towards local communities, it needs to be collated and screened to maximise its relevance and applicability. Where technologies permit, much 'converging' across media may be desirable. Here we want to enhance the demand orientation of the 'pushers' so that local communities are not overwhelmed with indiscriminate content.



4. **Strengthen the 'synthesis and adaptation' capacities of local organisations**

As many of the case stories emphasised, almost all of the potentially useful content 'out there' absolutely needs to be translated, adapted and synthesised to meet local needs. Mainly, these efforts focus on the messages being communicated, translating them into local languages or adapting them for local uses and situations. It also involves adapting content from one format into others, so that a digital or text format may be transformed and adapted into an audio or even performing format. Here we want to enhance local capacities to 'pull' external content into local shapes.

Concretely, these can be achieved by focusing on the following:

- **Valuing local content**. Many individuals and communities are unaware that their knowledge is valuable and useful – for themselves and for others. The higher value ascribed to external content is perpetuated in education and research, in the use of foreign 'experts', in a reliance on imported software and applications, and in local mass media that depend on imported content to fill programming schedules and newsprint. At every level therefore, **awareness** of the value of local content, in whatever format, needs to be created and recognition given to local initiatives in this area. The media has a key role to play in this. As argued in an editorial concerning local Tanzanian music, "we must learn to love what is our own, for if we don't, who will?" [Abdi Sultani, Tanzanian 'Sunday Observer', 12 March 2002]. A word of caution is needed here; Groups in power often see some types of local content as threatening, challenging or destabilising. They will need to be convinced before real progress can be made.

- **Motivating local content**. Anyone who works with content knows that it does not flow on its own. Even where people have the needed skills, and where technologies and finance are in place, the right **incentives** are necessary to make it flow. Different sectors have their own mechanisms – film fairs and script 'pitching' are important in film and television; donor funding is key in most development projects; community recognition is important in village level projects; local ownership and participation are essential if groups are to contribute their time and resources; while professional recognition and fame drive many others. Get the incentives wrong, and nothing will result. Understanding the motivations of people, communities and organisations is essential so that appropriate incentives and rewards can be put in place. A crucial aspect of this discussion is to guard the **rights** of the creator of the content so that it will not be exploited by others without due recognition. Classic incentives like patents and copyright are important but may need to be supplemented by mechanisms like the community content registries used by local communities to conserve biodiversity.

- **Making local content visible**. As was noted above, most local content is invisible, especially to international audiences with only digital connections. Making content visible needs to begin at the local level. Here, electronic **public spaces** could be set up as platforms where community content is produced, brought together and made more visible. Such public spaces could be associated with existing public places like post offices, village offices, or community resources like telecentres, libraries, schools and community radio stations. This approach could also be applied to sectoral, cultural, linguistic, and geographical 'communities' of all kinds. Currently, many of these spaces exist in the north or are provided by organisations in the north. They need to also exist in the south, and be owned by organisations in the south. Alongside these public spaces, public and media campaigns as well as fairs can be effective tools to actively promote and stimulate the creation and communication of local content. Here we can build on many experiences with film and book fairs – as well as those of the indigenous groups with their 'seed fairs' and competitions. Beyond these spaces, existing content needs to be sought out and supported. Thus, the Nigeria arts portal is not creating new content; it facilitates presentation of what is already there. A radio books project is using audio dramatisations to re-introduce the experience of African writers to African educational systems. In Saint Lucia, local librarians want to document unique local materials scattered across 17 libraries.

- **Addressing language issues**. Local content, indeed global content, is defined by its linguistic and cultural contexts. Language confers ownership. Language is also the catalyst that allows people to share and to understand. It is also a barrier to communication across different linguistic groups and communities. Taking local content seriously may force governments to re-think their language policies and the effects they have on stimulating or dampening certain forms of expression. Regarding hardware and software, local adaptations to cope with local languages and character sets are critical and urgently needed. Without these, the technology will continue to be an obstacle to local content creation and communication. Work is already in progress in this area. The 'translate.org.za' project is translating computer software into the 11 official languages of South Africa. In Asia and elsewhere, standard orthographies are being developed to represent non-Latin scripts on computers. As the Centre for Global Communications has recently reported however, to avoid errors, it is essential that the countries and communities concerned actually participate in the choice of scripts used to represent their languages. Other groups, like the Centre for Advanced Studies of African Societies, are translating and presenting content on topics like HIV/AIDS in various 'communities' of related African languages, using harmonised orthographies. Finally, the multi-media potentials of the new ICTs have attracted various experiments, in Uganda and Cambodia for example, in which oral and visual content is presented in local languages using CD-ROM, video CD, or DVD technologies. Beyond a focus on the way that languages interface with access to technologies however, it is also essential to address what has been called 'soft' or 'meaningful' access in which language influences how well users interface with technologies.

- **Connecting with tradition**. The traditional knowledge of local and indigenous people, often living in remote, vulnerable and impoverished areas, is often unvalued and untapped. It is also threatened. However, as the biodiversity cases from Kenya, Nepal, Malaysia, and China show, this

local indigenous knowledge can be documented and brought into contact with more formal worlds of science and education. In Nigeria, the knowledge of local healers is being blended with classic medical scientific know-how. Pacific islanders are recording their navigation skills for young people to learn from. There is now an urgent need to make sure that this type of **indigenous and traditional knowledge** is not sidelined or lost, nor that it is exploited without due recognition of the local owners. There is also much local value to be obtained by connecting these traditional/indigenous worlds with the 'scientific' world. Efforts in this area can help to bring a large body of valuable local knowledge into local, and potentially national and global, development processes. The content itself is not the only tradition to connect with. Many communities depend on **traditional communication processes** – such as drama, storytelling, and singing – to express their knowledge. These local communication processes are often more important than the exchange of any knowledge 'products.' Attempts to disseminate and share local content should therefore blend and take account of the existing wide range of traditional 'offline' channels.

- **Building adaptation skills**. There is a huge amount of external or global content that developing countries can draw on. Much is not relevant. Despite this, much is 'pushed' to local communities. A major local challenge is to download essential global knowledge and to make it useable and practical at the local level. Local information providers or infomediaries (publishers, libraries, NGOs, the media, ministries of health, education, etc.) are the key actors in this. It is not a simple translation process; it is adaptation. The local actors need analysis, adaptation, translation, and synthesis skills if they are to blend the foreign and the local to create new forms of local content. Integral to this is the ability to cross media, transforming text into visual or audio and vice versa, and to cross languages.

- **Promoting local ownership and participation**. The way in which content is created and exchanged is as important as the content itself. Well-established principles and approaches to participatory development can be tapped and applied in local content development initiatives. We must empower individuals and communities to take ownership of the content as well as the process used to express it. The community radio stations in South Africa illustrate how important community commitment is to the sustainability of the stations. Similarly, the development through radio projects in several African countries as well as the women's network in Uganda show the importance of local ownership and volunteerism as the key to unlocking the development potential of rural women.

- **Engaging in joint action**. The process of content creation and exchange is beyond the capacity of individuals and organisations on their own. As most of the cases generated for this study show, partnerships, collaboration and the strengthening of local associations and professional groups is the foundation for much more dynamic local content environments. 'Mediating' organisations that link community needs with technology, funding mechanisms and policy arenas are critical. A key incentive to joint action is for funders to explicitly promote and give priority to proposals based around collaboration or those resulting in the shared ownership of products or services.

- **Strengthening the local skills base**. One of the critical challenges identified in almost every case story and re-emphasised in the workshop is the **development of local capacities**. It is impossible to list them all here, especially since each area has its own specificities. Needs range from technical computer and Internet related skills, through needs assessment, writing and production (audio, textual, video), design, content repackaging, management, partnerships, fund raising, market research, and ways to generate commitment and participation. Local training opportunities and trainers are required to meet these needs. An essential ingredient is to build up a core reservoir of creative talent and entrepreneurship within communities, sectors, and countries/regions. Local groups, networks, and associations that promote higher professional standards and offer training play an important role in this.

Ideas to Follow Up

An Open Knowledge Network

In parallel with this study, OneWorld International has developed the notion of an Open Knowledge Network (OKN). This will provide a development content 'channel' to local and community access centres in developing countries. Managed from a network of regional 'hubs' and using an innovative blend of technical solutions and different media, it will draw on the content held in local public spaces to facilitate local-to-local knowledge exchange and to interface local with global knowledge. It will also result in more and more visible local eContent for development.

Such an ambitious effort has an important mobilising or catalysing role, providing a critical mass and drive that many local initiatives can cluster around and feed off in a symbiotic way.

Local Thematic Actions

Nevertheless, while the OKN may stimulate the exchange of eContent across communities and countries, on the ground efforts are the key to local content generation. Many already exist, but they are not as effective or as successful as they could be. Locally, skills, expertise, and experience are often in short supply and, as mentioned earlier, the competition is strong. Various local capacity building initiatives that strengthen the local 'push' for local content are thus essential. Developed and delivered through partnerships, these should be focused on specific sectors and countries (or sub-regions), mobilising the specialised content expertise of organisations and networks already working on these issues.

Looking to the Millennium Development Goals, high priority thematic actions can be developed in health, education, agriculture and rural livelihoods, and the environment. Crosscutting issues like local languages, traditional knowledge, and intellectual property also warrant specific attention. Locally led capacity development, process facilitation, as well as actual content creation and dissemination are likely to be central to these projects. A key element is to document local content lessons for others to learn from.

Illustrative Directions for a Local Health Content Initiative

Linking traditional and non-traditional knowledge: the Fantsuam Foundation in Nigeria is one attempt to blend local and external content, knowledge and experience. Documenting the process and supporting similar approaches is worthwhile. This work is going on in Africa, Asia and Latin America among indigenous populations and where traditional healers play a major role in health care (often in the more remote, vulnerable and impoverished areas). How? Organise workshop(s) to encourage sharing of techniques; produce a series of process guides; set up an electronic community of interest; create a 'private' web space belonging to this community to allow for deeper sharing and exploration; organise exchange visits and training activities that help to reinforce the process, stimulate learning, and add to the body of knowledge.

Exploring local communication processes: the Action Theatre example from Malawi - although it dealt with conservation/agriculture - is relevant for health communication work (and similar techniques are being used in various settings around health issues). Listening to the community, working carefully and patiently, exploring what approaches people feel comfortable with, gaining an understanding of the channels of communication used and trusted and the cosmology underlying health concerns, can help to develop new alternative cultural perspectives on health communication. Again, the focus is on the process: how to identify an effective process of communicating about health that will work no matter what the issue, what the setting. How? Identify community-based communicators and researchers in health (and/or other sectors) who would be willing to explore the analysis of what works in their settings and why, with a view to developing a process-based approach that moves away from simple message delivery towards ownership, understanding and action - use face-to-face and electronic discussion to elaborate a process, based on daily experience in the field.

Adapting external knowledge for local consumption: This is stepping down some essential global understanding to make it useable and practical at the local level. This is not a simple translation process; it is adaptation: what will work that is good practice and do-able given the resources, yet still be based on sound practice internationally. The examples from Uganda and Ghana and to a certain extent Zimbabwe point the way to this. How? Capacity building/training in basic communication skills – assessing need (listening/observing), reviewing available information, repackaging (writing, editing, reformatting (using different media)) testing, monitoring, revising. Workshops – not one-off training sessions, but a series of linked events or purpose-directed activities – getting people to produce a resource and then following up with them to see if it did what they expected and what could be done differently. Again looking at communities of interest and support that can stimulate continual learning and development of approaches. Related to this is the need to build up a core reservoir of creative talent and ability within a country/region that can be used for 'south-south' communication. This is intensive human development around communication work.

Strengthening local communication systems (including integrating new technologies): This starts working with the communication systems at the local level and tries to improve them, get communication flowing, get dialogue happening, get discussion underway. How? AfriAfya in Kenya is a good example of this: building on existing field centres where health activity is occurring, looking at what hardware and technology could support/improve communication flows, and look at what traditional communication techniques could be combined with 'new' techniques. Underpinning this approach is the recognition that collaboration and cooperation among agencies are important. How? Workshop a collaborative approach; resource the basic infrastructure; engage the communities to contribute; network the field centres; stimulate communication flows; encourage sharing; document the process; advocate for others to try it. This is probably single country specific (all of these are, but some can be in several countries at the same time).

Encouraging convergence of technologies: Telecentres and radio - television, radio, print, and social mobilisation - Soul City in South Africa, and there are more examples. Combining technologies, whether they are the more recent ones or in combination with some traditional technologies, is likely to reap huge benefits. Linking technologies and encouraging diversity helps to encourage multiple channel, diverse approaches in communication. Those are always more effective. How? Experiment with pilot programmes, although probably outside the scope of a new programme of work; however, working with such programmes to document their learning, to explore possible convergence options and to test the effectiveness of different approaches could bring extra value.

Storytelling: Creating the spaces and the opportunities for people to tell their stories - and then to reflect collectively on what they mean – is one of the most powerful communication tools we have. There are many examples. We just need to do more. And we need to pull the lessons out: it's not enough to just tell the stories, we need to involve the storytellers in the analysis of what it all means (and in such a way that the sparkle and the excitement of the stories doesn't get lost).

Content 'Pitching'

An interesting approach practiced in the African television and film sector is known as 'script pitching.' Essentially, it is a process by which a 'storyteller' or producer of local content is linked up with film or television producers and financiers. In competitive processes, ideas are refined, script development is supported, training is provided, financing is obtained, and a film is produced and distributed. Supported by agencies like UNESCO and Hivos, the process is decentralised nationally and regionally with regional film festivals, like Sithengi, acting as idea marketplaces for producers, financiers, and filmmakers.

The model could be applied in other media or sectors as a way to motivate high quality local content production. In a more ambitious form, it could be organised in a series of workshops at the local, regional, and continental level where local content project proposals are 'pitched' and winners selected for financing or to receive other prizes. In a simpler form, such an initiative might simply provide prizes and some funding for digital content development ideas, within or alongside existing pitching sessions.

In a sense this parallels what the InfoDev/IICD ICT Stories project and the Stockholm Challenge are doing in the ICT sector – they both give prizes to people submitting interesting and innovative stories concerning the uses of ICTs. In their case though, the project has already been implemented.

Incentive financing of this type, linked with necessary capacity development, could be provided nationally and regionally through existing bodies and serve to stimulate various types of local content for development.

Afterword

It is clear from all the cases and experiences that information and communication technologies, broadly defined, are being used to catalyse and mobilise and share local content as never before. The newer digital 'e-technologies' have much to offer. This is not the place to explain how ICTs contribute to development. However, some particular features in relation to local content are useful to highlight.

ICTs can be excellent tools to take existing content and make it more visible and accessible, locally or globally. They are being used to record and store vital information about people and their health as well as about, for instance, biodiversity and local medicinal remedies. Being able to record and present audio and visual content alongside text is a major step forward, helping to overcome some literacy problems.

Moreover, newer more portable devices can travel quite easily to where the people are, allowing existing content to be distributed more widely. More importantly, this makes it possible for quite remote and disadvantaged groups to themselves become content producers or publishers – on video, CD ROM, radio, DVD, or the web. More generally, wider use of digital systems in, for instance, filmmaking, is driving costs down as tasks that used to need specialists or studios can be done quite professionally on computers.

Of course, when everyone is a 'publisher', there is a danger that inappropriate or incorrect content is widely disseminated. Furthermore, accessible digital content, however flawed, may be valued higher than other forms of content, just because it is accessible.

One long-standing concern of the indigenous knowledge community, that much local content is culturally and contextually specific and thus does not travel well, is also being addressed with the new ICTs. For example, Peoplink is trying to contextualise the products that it sells by including self-recorded or written stories by the artist, about the art, etc. Farmer knowledge in Sarawak and Yunnan is registered so when it 'travels', its origin and particular context is also accessible. The ICTs can thus expose local content to global audiences. They can also help ensure that the local content 'containers' are enriched with local context in a variety of forms.

Finally, despite being mainly seen today as tools to increase access by communities to information and knowledge, many ICTs can empower local communities, precisely by giving them access to, and control of, the tools they need to express and communicate their own local knowledge. For many local communities, this is still one of the few assets that they truly own.

ACKNOWLEDGEMENTS

This project itself has often felt like an exercise in local content expression in which a disparate community has gradually expressed many and varied experiences and insights.

During the process, we have found ourselves emulating some of the key messages of the study.

- We have valued local content. We sought to locate our own 'local' content; to track and document the knowledge embedded in the brains of practitioners working in this field. We particularly sought to learn from projects in developing countries.

- We have motivated local content. In some cases there were small financial motivations to document experiences. More generally, case writers would be first in line to join a workshop in Tanzania. But as the initiative gained momentum, the flow of contributions far exceeded expectations. In hindsight, perhaps the greatest incentive for contributors was a perceived opportunity to highlight their experiences and to interact in some way with processes like the DOT Force and with the donor community.

- We are making local content visible. An original objective of the project is to make local content processes visible, by telling some stories, and by making them widely available. All the content is available through the IICD and iConnect online websites. Some content has been further worked into articles for publication elsewhere.

- We have engaged in joint action. This was a project with a short timeline and a massive potential agenda. It could only have been achieved through the collaboration and willing contributions of many organisations and individuals. We are indebted to them all. They are listed below.

Ms. Edith Adera	IDRC, Kenya – contribution
Mr. Md Shahid Uddin Akbar	BDHealthInfo, Bangladesh – case writer
Mr. Chris Armstrong	National Community Radio Forum, South Africa – workshop participant; case writer
Ms. Lynda Arthur	Health Foundation of Ghana, Ghana – workshop participant;case writer
Mr. Imruh Bakari	Zanzibar International Film Festival, Tanzania – thinkpiece
Mr. Krishna Baral	Local Initiatives for Biodiversity, Research and Development, Nepal – workshop participant; case writer
Mr. Simon Batchelor	Gamos Ltd, UK – workshop participant; case story coordinator and writer
Mr. Herman Brouwer	Gamos Ltd, UK – case writer
Mr. Wietse Bruinsma	NUFFIC, Netherlands – contribution
Mr. Habby Bugalama	Sengerema Multipurpose Community Telecentre, Tanzania – workshop participant
Mr. Jumanne Bwamkuu	Tanzania Commission for Science and Technology, Tanzania – workshop participant
Ms. Isabel Carter	Tearfund, UK – case writer
Ms. Rosa Cheng	Fundacion Acceso, Costa Rica – case writer
Mr. Andrew Chetley	Healthlink Worldwide, UK – workshop participant
Mr. Roy Colle	Cornell University, USA – contribution
Mr. Saul Cruz	Armonia, Mexico – case writer
Mr. David Curtis	Healthlink Worldwide, UK – contribution
Mr. John Dada	Fantsuam Foundation, Nigeria – workshop participant; case writer

Ms. Jemima Dennis-Antwi	Ministry of Health, Ghana – case writer
Ms. Jennifer DePasquale	Dreyfus Health Foundation, USA – case writer
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Mr. Mohamed Dume	IPP Media, Tanzania – workshop participant
Mr. Laurent Elder	IDRC, Senegal – contribution
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Mr. Tim France	Health and Development Networks, Thailand – case writer
Mr. Andrew Frankel	Rakumi Arts International, USA – case writer
Ms. Rosa M. Gonzalez	UNESCO, France – case writer
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Mr. Abdallah Hassan	Economic and Social Research Foundation, Tanzania – workshop participant
Mr. Aaron Hirsch	Consultant, USA – workshop participant; experience review; think piece; case writer
Mr. Russell Honeyman	Africa Film & TV, Netherlands – case writer
Ms. Stella Hughes	UNESCO, France – workshop participant; case story coordinator
Ms. Salamatu Jibril	Women Farmers Advancement Network, Nigeria – workshop participant; case writer
Ms. Racheal Wamae Julius	Kyanika Adult Women Group, Kenya – workshop participant
Mr. Jackton Kaijage	Research Consultant, Tanzania – workshop participant
Ms. Charlotte Kawesa	Monitor Publications Ltd, Uganda – case writer
Ms. Louise Keyworth	The Story Workshop, Malawi – workshop participant; case writer
Mr. M. Shamsul Islam Khan	Centre for Health and Population Research, Bangladesh – case writer
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Ms. Margareth Nzuki	Economic and Social Research Foundation, Tanzania – workshop participant; case writer
Ms. Dorothy Okello	Women of Uganda Network, Uganda – case writer
Ms. Aida Opoku-Mensah	United Nations Economic Commission for Africa, Ethiopia – workshop participant; keynote for workshop
Mr. Don Osborn	Bisharat – contribution
Mr. Quirinus Oyugi	Agency for promoting Sustainable Development Initiatives, Uganda – case writer
Mr. Paul van Paaschen	Hivos, Netherlands – contribution
Mr. Neil Pakenham-Walsh	International Network for the Availability of Scientific Publications, UK - workshop participant; case story coordinator; think piece writer
Ms. Helga Patrikios	University of Zimbabwe, Zimbabwe – workshop participant; casewriter
Mr. Kwesi K. Prah	Centre for Advanced Studies of African Society, South Africa – workshop participant
Mr. Paul Quek	International Plant Genetic Resources Institute, Malaysia – case story coordinator
Mr. Allan Ragi	Kenya AIDS NGOs Consortium, Kenya – case writer
Ms. Sandra Rattley	Worldspace Foundation, US – contribution
Mr. Don Richardson	TeleCommons Development Group, Canada – contribution
Mr. John Rose	UNESCO, France – case writer
Ms. Diana Rosenberg	International Network for the Availability of Scientific Publications, UK – case writer
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Mr. Daniel Salcedo	Peoplink, USA – case study writer
Mr. Peter Schioler	UNESCO, France, case writer
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Mr. Anil Subedi	Local Initiatives for Biodiversity, Research and Development, Nepal – case writer
Ms. Fatima Suleman	Health Systems Trust, South Africa – case writer
Mr. David A. Tibbutt	UK – case writer
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Ms. Leonie Vlachos	Bridges.org, South Africa – workshop participant
Mr. Mike Webb	Big World, UK – case writer
Ms. Veronica Wilson	African Media Productions, Netherlands – workshop participant; case writer
Ms. Deirdre Williams	Saint Lucia - contribution
Mr. Dylan Winder	DFID, UK – contribution
Ms. Eileen Yen Eelee	Sarawak Biodiversity Centre, Malaysia – workshop participant; case writer
Mr. Keith Yeomans	DFID, UK – contribution
Mr. John Young	Overseas Development Institute, UK – contribution

Finally, like other communities united around a common issue, we also, as the box below illustrates, began to create and express our own content.

Creating content - The Kitete* song

Words: Rachel Wamae Julius and Kyanika Adult Women Group (KAWG), Kenya
*Music: COSTECH/IICD Workshop participants***

Long live 'Kitete', our multipurpose plant;
The narrow-necked 'Kinandu', the medicine container;
The gourd box, 'Isanduku ya kwikia Ngua' in which our grandfathers kept their clothes;
The half split 'Nzele' for porridge and food;
The fresh 'Mongu' that we eat.

Long live 'Kitete', the hidden treasure;
I see in you 'Kitete' a generous gift of nature;
The discovery of our foreparents for us to use and to conserve for our posterity;
The water gourd, the serving spoon, the gourd flask to store our milk;
The gourd in which our grandfathers brewed beer.

Long live 'Kitete', your uses are innumerable;
Who needs the plastic or the glass? So artificial!
To pollute our environment, our cultural heritage must prevail;
For all our utensil needs and many more
'Kitete' is the answer!

* Kitete is the name used by people in Kenya's Kitui District to describe certain species of Bottle Gourd. It is used locally to carry water, poridge or milk.

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IICD PROFILE

The International Institute for Communication and Development (IICD) assists developing countries to realise locally owned sustainable development by harnessing the potential of information and communication technologies (ICTs). IICD works with its partner organisations in selected countries, helping local stakeholders to assess the potential uses of ICTs in development. It also strengthens the capacities of local partners to formulate, implement and manage development policies and projects that make use of ICTs.

IICD realises its mission through two strategic approaches. First, Country Programmes bring local organisations together in a Roundtable Process. Within this Process, they formulate and execute ICT supported development policies and projects. The approach aims to strengthen local institutional capacities to develop and manage Country Programmes, which are currently being implemented in Bolivia, Burkina Faso, Ghana, Jamaica, Mali, Tanzania, Uganda and Zambia.

Second, Thematic Networks link local and international partners working in similar areas, connecting local knowledge with global knowledge and promoting South-South and South-North exchanges. Thematic Networks focus on several sectors: education, health, and livelihood opportunities (especially agriculture). Their priority is based on local partners' needs; they are often also the focus of sector wide approaches (SWAps). While the environment sector so far has been a minor local priority, knowledge on e-governance - improved governance using ICTs – is increasingly in demand.