

# Approach

From need to sustainability  
Empowering people to use ICT for their development

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## << IICD'S APPROACH IN PRACTICE

*'I didn't know anything about computers when I became the focal person of the ICT programme at Mubende Light Secondary School in 2003,' says secondary school teacher Kereson Katongore. 'But with the support of IICD, I was trained in information and communication technology.' Katongore and seven co-workers were among the first to benefit from a computer room set up by the school with IICD's support. The computer area quickly became a multifunctional community space. During the day students attend classes and do their homework there. In the evenings it becomes a computer training facility and paid Internet café. Local farmers stop by to look up market and extension information, and local residents come to learn computer skills. Katongore continues to develop his skills. 'As the people came in more often, they also wanted to know more advanced programmes such as Publisher,' he says. 'This meant that I had to study more.' Katongore's students and colleagues saw the multiple benefits the computers offered. Soon all the school's teachers and administrative staff were using computers in their work as well. Katongore has since helped two other schools set up computer facilities.*

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## INTRODUCTION

**Information and communication technology (ICT) can help people transform their lives, particularly in countries of the global South. Think, for example, of the farmer in Peru who receives more money for his produce after learning to access market price information using a mobile telephone. Or, consider the doctor in rural Tanzania who saves a life by using an Internet connection to consult with a distant specialist on a complex case.**

IICD's mission is to enable 15 million low-income people in developing countries to access and use ICTs to address the challenges that they face. ICT offers opportunities for increased well-being and sustainable economic development, in all sectors and at all levels. IICD helps institutions and organisations to design and implement ICT-enabled projects and programmes. It actively supports four sectors in particular: (i) education, (ii) health, (iii) agriculture/economic development and (iv) climate and water.

IICD uses a distinctive participatory and multi-stakeholder approach. Whereas many ICT for Development (ICT4D) projects focus on the transfer of new or innovative technologies, IICD focuses not on technology, but on people. More than 15 years of experience has proven that this approach works. In 80% of IICD projects, partner organisations succeed in integrating ICT into their core business by the end of the project period. This is an impressive track record compared to the average sustainability figure of 15% for ICT4D projects.

IICD's focus is on strengthening individual, organisational and institutional capacities so that people and organisations in developing countries can use ICTs effectively and independently to achieve their development goals. In a period of about three to five years, we guide our partners through a participatory process in which they work together in a network of like-minded organisations, experts, government agencies and private sector actors. One of our core principles is *learning by doing*. Rather than import on-the-shelf solutions, IICD facilitates a process in which stakeholders co-create and implement their own ICT solutions. They thus develop a broader understanding of how ICT can be fully integrated into their programmes. At the end of the process, our aim is to see our partners well equipped to find and use information and ICTs on their own in such a way that benefits them and the people they serve.

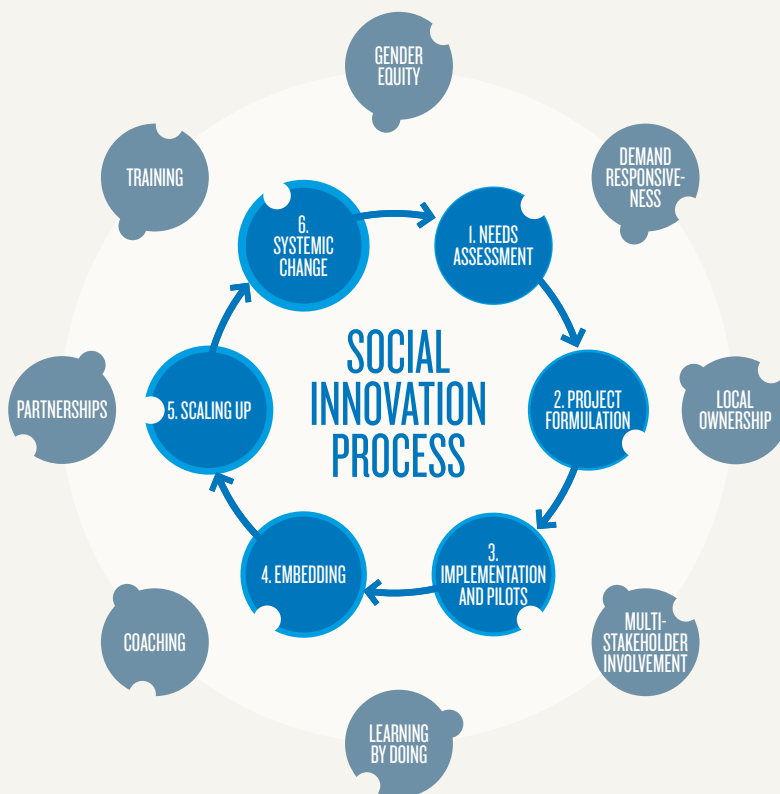
We pay special attention to gender in the design and implementation of our projects. This ensures, for example, that the solutions developed are accessible to and relevant for both women and men. In identifying needs and priorities,

focus groups are held for women to ensure that their views and perspectives are taken into account from the start.

Knowledge sharing and learning are important pillars of our approach. They therefore underlie the entire process. Through knowledge-sharing networks, exchange visits, learning workshops and online platforms, locally relevant knowledge and expertise is built. This, in turn, forms a strong foundation for leveraging practice-based experiences into larger-scale initiatives.

IICD's approach consists of six phases, which we collectively call our 'social innovation process'. The six phases are (i) needs assessment, (ii) project formulation, (iii) implementation and pilots, (iv) embedding, (v) scaling up and (vi) systemic change. The different phases and activities are described in more detail in the sections below. While these phases and activities are presented in a particular sequence, IICD's approach is dynamic and flexible. If certain activities are not needed or their timing needs to change, that is what we do. Our focus is on results. We seek to learn how we can best assist our partners in using ICTs in their organisation and sector and sustain that use into the future.

## FROM NEED TO SUSTAINABILITY THE IICD APPROACH



**90%**  
OF OUR PROJECT  
PARTNERS ARE  
HIGHLY SATISFIED  
WITH OUR  
APPROACH

PROCESS STAGE  
 GUIDING PRINCIPLES

*“In the workshops, everyone is involved. This ensures that risks are avoided and creates a sense of togetherness.”*



## PHASE I NEEDS ASSESSMENT

At the end of phase 1, partners:

- have come up with ICT4D ideas that serve the needs of the target group ✓
- are ready to start an ICT4D project ✗
- are running a small ICT4D project ✗
- have the capacity to fully integrate ICT in their organisation ✗

The first phase in IICD's approach is identification of needs, challenges and actors within a certain sector and country. Preparatory activities take place in this phase with two central elements:

- problem analysis and target group consultation at the partner level
- roundtable workshop

### Problem analysis and target group consultation at the partner level

IICD bases its in-country activities on a sound analysis of needs and problems in the country and sector involved. An important first step here is identification of a target group's information and communication needs and gaps and clear definition of the local context. The actual problem analysis and target group consultation is done by our local programme partners. This is deliberate, to ensure local ownership and thereby the sustainability of any ICT solutions designed. IICD's role at this stage is that of advisor and facilitator. We provide strategic advice to our partners on what methodologies and facilitation techniques they might use to analyse a problem. The target groups are actively involved in the problem analysis. If needed, IICD offers more targeted assistance, for example, evaluation of the

local context in relation to technological possibilities and requirements.

### Roundtable workshop

Once the information and communication needs and issues are clear, IICD prepares and facilitates a roundtable workshop in collaboration with a local organisation or consultant. At this workshop, 10 to 20 key stakeholders in a particular sector sit down together and review the problem analyses that were done, subsequently identifying long-term challenges and opportunities. Finally, they agree on a shared vision and ICT4D programme for the sector. During a three to four day period of reflection, analysis and priority setting, different scenarios and ICT4D project ideas are generated and discussed.

The roundtable workshop is an important starting point in creating ownership among key stakeholders and in facilitating change at the sector level. The roundtable workshop generates genuine understanding and appreciation among stakeholders – for themselves, for others and for their context. Ultimately, this enables them to overcome the barriers to joint action that may inhibit public, private and civil society players from working together productively.



# PROJECT FORMULATION

## PHASE 2 | PROJECT FORMULATION

At the end of phase 2, partners:

- have come up with ICT4D ideas that serve the needs of the target group ✓
- are ready to start an ICT4D project ✓
- are running a small ICT4D project ✗
- have the capacity to fully integrate ICT in their organisation ✗

After the roundtable workshop, the stakeholders bring the project ideas back to their various organisations and re-examine them in light of their individual mission and activities. If the ideas are still considered worthwhile and practicable, local organisations develop them further into project proposals, in collaboration with their constituencies. In this phase, IICD support emphasises strengthening the capacity of local organisations to develop ICT4D programmes and strategies and to raise the ICT skills of key actors to a basic level. In the project formulation phase we undertake four main activities:

- solution design workshops
- technology fairs and technology exposure events
- basic ICT training
- advice and coaching

### Solution design workshops

A solution design workshop is a four to five day event in which the project ideas that emerged during the roundtable are brought to a higher level of development. The workshops are executed by IICD's technical specialists, in cooperation with local technical advisors. Participatory techniques are used to promote knowledge sharing and skills development. The workshop programme is aimed at familiarising

participants with examples of sector-appropriate technical solutions and discussing key issues, requirements and approaches to consider during project development.

The solution design workshop thus equips partners with the basic knowledge and skills they need to get the most out of existing technologies, even beyond the specific projects that they are formulating. Partners learn techniques for seeking further information and tools, ways to sustain their operations and how they might better serve their beneficiaries in the long term with the use of ICTs. Finally, in the workshop, project actors receive technology-based resource materials that enable and encourage them to continue learning on an individual basis after the workshop.

### Technology fairs and technology exposure events

Technology fairs are a means to bring project partners in contact with local technical advisors and potential suppliers. During a technology fair, suppliers showcase their products, and project partners establish contacts and business relations with local service providers (such as web development companies and network operators). Such contacts serve them well in both the formulation and the implementation of projects. With the technology fairs,

IICD stimulates demand-driven and locally tailored processes of technological solution design.

### Basic ICT training

Depending on the ICT literacy of the future project team, IICD may decide to offer a basic ICT course for partner organisations, to enhance their skills in information technology and online communication. During a two day workshop, project teams learn to work with email and chat programs. They gain experience in searching the Internet for information, and they become familiar with ways to manage, store and back up data.

### Strategic and technical advice

Throughout the entire process, IICD country managers and technical advisors are available to provide strategic and practical advice. Support at this stage tends to be very specific, such as assisting a partner in finding an appropriate technical solution for an issue identified in phase 1. Also during this phase, technical advisors have one-on-one sessions with partner organisations, for example, to refine and validate a technology solution that has been proposed; to discuss how partners will train teachers, nurses or farmers in the use of the technology; or to finalise the activity plan and budget.



*“It has been valuable that in-house skills were made explicit during a visit of IICD’s Technical Advisor: skills we were not even aware of before.”*

## WHO DO WE SUPPORT IN OUR PROCESS?

IICD’s capacity development interventions focus on different levels. In our work in Africa and Latin America, three overall types of partners can be distinguished:

### Project partners

Most of the time and efforts of IICD staff is dedicated to strengthening capacity of project partners. Project partners of IICD include grassroots organisations, small companies, NGOs and government institutions. Project partners are selected during the Round Table process. Selected partner organisations have a mixed background, from grassroots organisations to businesses and governments. Together they are expected to have an impact on the whole sector and thereby contribute to poverty alleviation in their respective countries.

### End-users

End-users are involved from the very start of a project. They are people who directly use or contribute to the information and communication services initiated through IICD projects. End-users access these services for example at a community center, a school, a hospital or at an information center run by a farmer’s cooperative. End-users are not the same as beneficiaries. Beneficiaries represent a larger group of people

who benefit from IICD projects. Beneficiaries are for example people who can access information through a website that was set up by a partner organisation or people who have access to information from a radio broadcast.

### Support organisations

To be able to give continuous, tailor-made and on-the-ground support to the partner organisations IICD works with a number of local support organisations or local consultants.

- **Training partners and consultants** assist project partners with formulation of projects, and provide training and technical advice
- **National ICT for development network partners** assist project partners with knowledge sharing, lobby and policy participation
- **Monitoring and Evaluation (M&E) partners** assist project partners and train partners how to collect data. M&E partners of IICD are independent organisations, usually consultancy firms, who play an important role in data analysis and feedback and discussing of M&E data with project partners and end-users. Including an intermediary partner in the M&E process is a deliberate attempt of IICD to receive more objective and reliable feedback and data from partners.

# IMPLEMENTATION AND PILOTS

## PHASE 3 IMPLEMENTATION AND PILOTS

At the end of phase 3, partners:

- have come up with ICT4D ideas that serve the needs of the target group ✓
- are ready to start an ICT4D project ✓
- are running a small ICT4D project ✓
- have the capacity to fully integrate ICT in their organisation ✗

Once the proposals are finalised and approved, our project partners themselves take full ownership of the projects and activities, in terms of both operations and strategic development and management. Putting the partners in the driving seat from the start helps to achieve sustainable results. Most projects start with a piloting phase. Here, partners test their ideas on a small scale by implementing a basic prototype of their ICT solution. A prototype could be, for instance, a website or database, or a trial run of a mobile telephone service for health information. In this phase, IICD provides strategic and technical advice, coaching and staff development activities. In particular, we offer five types of support:

- train the ICT4D trainer
- technical update seminars
- collective skills training
- on-the-job coaching
- advice and coaching

### Train the ICT4D trainer

In each country, IICD develops and trains a national pool of technical resource persons who provide on-the-ground support to project partners and end-users. IICD conducts 'train the trainer' workshops for two types of main resource persons: local training support partners and technical officers in our partner-organisations. For the first group,

the train the trainer workshops focus on strengthening the facilitation and training skills of the local support partners, which they need to be able to adequately address capacity gaps in ICT4D partner organisations. In the workshop participants get to know different training methodologies, learn how to conduct an assessment to identify training needs, and how to develop appropriate training plans and performance indicators for different target groups. For the second group, the technical officers in our partner organisations, IICD provides a workshop in which the officers learn how to train non-technical people, such as nurses, teachers, farmers in the use of the ICT solution. Practical learning-by-doing sessions show the technical officers how to transfer their knowledge and how they can enhance their facilitation skills.

### Technical update seminars

Software tools evolve rapidly, as do hardware and systems, procurement methods, licensing practices and so forth. Our partners must keep abreast of these developments if they are to make informed decisions about critical technology-related issues. IICD supports national partners in this by organising regular technical update seminars. The aim of these seminars is to raise awareness and increase knowledge about trends and programme-appropriate developments in ICT. Project partners themselves determine the themes for







upcoming seminars through various feedback instruments, such as surveys and focus groups.

### **Collective skills training**

To follow up basic ICT training provided in the project formulation phase, IICD conducts further ICT training in the implementation phase. Participants are project actors and end-users, who receive refresher courses or more in-depth instruction on ICT topics. In the collective skills training, attention is paid to basic skills, such as online communication and multi-media, but also to project-specific ICT advances, such as the use of market price information systems, development of education materials and the use of health management information systems. After this training, participants have the know-how to work with the technical solution that was designed in the project formulation phase.

### **On-the-job coaching**

After training events and workshops have taken place, IICD provides on-the-job coaching to partner organisations and end-users to address specific gaps or challenges at the project level. Based on an assessment of needs and knowledge gaps, a local technical advisor spends several days at the project site working with end-users (such as health workers, teachers or farmers) in their own environment.

On-the-job coaching provides users with one-on-one practical sessions with a trainer, offering opportunities to experiment with new tools and methodologies under expert supervision. Beyond this, on-the-job coaching is an important means of furthering knowledge transfer and tailoring methodologies and tools to partners' needs.

### **Advice and coaching**

Advice and coaching during the implementation phase gives partners the confidence, knowledge and skills to put their formulated plans into action. IICD is available to provide specific advice, for example, on ICT policies, IT resources, or on the hands-on use of applications. Next to the technical and operational support, IICD country managers play an active role in strengthening the overall organisational capacity of project partners. This could involve, for instance, helping partners to improve organisational structures, to formulate appropriate human resource policies and to address sustainability issues. Finally in this phase, particular attention is paid to ensuring that project partners know how to build capacity among their end-users in the project.



## PHASE 4 EMBEDDING

At the end of phase 4, partners:

- have come up with ICT4D ideas that serve the needs of the target group ✓
- are ready to start an ICT4D project ✓
- are running a small ICT4D project ✓
- have the capacity to fully integrate ICT in their organisation ✓

After the initial project plans have been successfully implemented, IICD continues to support partners to fully integrate and roll out ICT in their development programmes. It is in this phase that local organisations start to fully understand and use the potential of ICT to achieve their development goals. In the embedding phase, IICD support is more strategic, focusing on change management, knowledge sharing and lobbying. Activities fall under two main categories:

- advice and coaching
- knowledge sharing and policy participation

### Advice and coaching

At this stage of the process, IICD assists partners in integrating ICT into their organisation beyond the specified pilot or project period. Oftentimes, far-reaching changes in organisational structure and culture are needed to effectively integrate ICT in such a way that it leads to substantial and lasting improvements. Change management, however, raises questions, such as how to develop a long-term vision and strategy, how to align people within an organisation, and how to manage human resources. During this phase, IICD also helps partners mobilise resources to scale up or leverage project activities. In some cases, IICD and experienced partners are requested to assist other organisations or institutions with similar processes to integrate ICTs into programmes.

### Knowledge sharing and policy participation

Throughout the whole process, IICD invests in knowledge sharing and learning as an explicit strategy to improve practice, to stimulate innovation and to leverage experience. By scaling up the use of products or services – and by replicating successes at a larger number of project sites – IICD and partners multiply the benefits of the work.

<sup>1</sup> <http://iconnect-online.org>

Exchanges take place mainly via national ICT4D networks, which IICD organises around sectors and cross-cutting issues. Alongside face-to-face network meetings, national ICT4D networks have their own local ICT websites, local newsletters and reports in which they document project results and experiences. The multi-stakeholder networks also play a vital role in assisting and lobbying the government to integrate and scale-up ICT at a national level.

Besides knowledge sharing at the national level, IICD facilitates international exchanges of experiences. We organise cross-country events at which IICD partners learn from experiences in other countries and give one another advice. In addition, IICD developed the 'i-connect' online platform,<sup>1</sup> where people active in ICT4D can find and engage with peers, profile their work and share relevant content and resources. The i-connect platform thus provides a bridge between international networks and field-based experiences. As such, it contributes to building a global knowledge base on the use of ICTs as a tool for development.

### Monitoring, evaluation and learning

IICD has a continuous mechanism in place to monitor progress and capture lessons from projects and programmes. We collect user and beneficiary feedback at each phase in the process via online surveys and surveys via mobile telephone. Findings are subsequently discussed in focus groups with users and beneficiaries of the project. Together, impact data is analysed, areas of concern are identified and discussed, and solutions to challenges are found. The results and lessons captured provide valuable insights into the overall use, satisfaction and impact of IICD projects and processes.

# COMPUTER LAB



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## PHASE 5 AND 6 SCALING UP AND SYSTEMIC CHANGE

For IICD, an ICT project or programme is never a goal in itself. Rather, it is a first step towards embedding and consolidating the use of ICT to tackle development challenges. Once a sector programme has reached completion – meaning that there is a critical mass of projects, capacity and knowledge to implement new ICT4D activities – IICD takes on the role of adviser and broker in the further expansion of ICT within that sector. Building on our experiences and those of our partners, we help governments, donors and NGOs to develop and implement national strategies and policies and large-scale ICT4D projects and programmes.

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**IICD's vision is a world in which people are fully able to use information and technology to better their own future and that of their society.**

**IICD's mission is to enable 15 million low-income people in developing countries to access and use ICTs to address the challenges that they face, understanding that ICT offers opportunities for increased well-being and sustainable economic development in all sectors.**



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Algemeen Nut  
Beogende Instelling

**ANBI**

