



Roundtable Report

21st September 2012

International Conference Center
of Geneva

ICTs for Africa

Examples from
agriculture and
the health sector

Initiative of



With the support of



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TABLE OF CONTENTS

TABLE OF CONTENTS	3
SUMMARY	5
PROGRAM	6
DISCUSSION SUMMARY	7
WELCOME CONFERENCE	7
ONGOING INITIATIVES: COMMUNICATION, ICT AND DEVELOPMENT.....	8
BEST PRACTICES: AGRICULTURE FOR TOMORROW?	11
INGREDIENTS FOR FUTURE PROJECTS AND PARTNERSHIPS: REQUIREMENTS, INTERESTS AND NEEDS.....	14
CONCLUSIONS AND RECOMMENDATIONS.....	16
APPENDIXES.....	21
APPENDIX 1: BIOGRAPHIES OF SPEAKERS.....	21
APPENDIX 2: PRESENTATION OF INSTITUTIONS	27
APPENDIX 3: TEXT BY LUCAS LUISONI	31
APPENDIX 4: ARTICLE ABOUT GUÉDÉ-CHANTIER.....	33
APPENDIX 5: PRESENTATION BY MOUSTAPHA NDIAYE	35
APPENDIX 6: PRESENTATION BY SWITHIN MUTAASA	39
APPENDIX 7: PRESENTATION BY CÉLINE CASTELIGNE ET FILMON ABRAHA.....	44
APPENDIX 8: PRESENTATION BY MICHAEL RIGGS	47

SUMMARY

On 21st September 2012, five years to the day since the launch of the initial idea of the E-TIC program, concrete results were presented at the International Conference Center of Geneva on the use of information and communication technologies (ICTs) in rural areas of Senegal, Mali and Uganda, more specifically in the fields of agriculture and health.

Speakers, both physically present at the International Conference Center of Geneva and others calling in from Senegal, Uganda, Canada (Mali) and Italy, shared their experiences and good practices.

At the heart of the discussion was the inclusion of oral communities through a multimedia approach, tackling issues such as organic farming, health problems due to the unprotected use of pesticides and more.

The afternoon started with opening remarks by [ICVolunteers](#), International Telecommunications Union ([ITU](#)) and *Organisation Internationale de la Francophonie* ([OIF](#)), placing the roundtable in the context of multilateral cooperation related to the development of information and communication technology approaches and strategies.

The session that followed focused on concrete projects related to knowledge sharing, ICT and development within various sectors in Africa. The speakers shared their experiences, with a particular focus on the “E-TIC: Sahel InfoHubs project” related to agriculture, fishing and husbandry in Senegal and Mali. The session also presented the experience of Bwindi National Park and its telecenter in Uganda and the Ethical Fashion project, starting in Ghana.

What agriculture for tomorrow? This was the basic question asked by the moderator of a session focusing on agricultural practices. The starting point of this session was the experiences of the work done in the development of the [AgriGuide](#). The question of the use of pesticides, environmentally respectful practices and organic farming as well as the proper use of relevant communication tools were at the heart of the discussion.

The roundtable ended with a discussion about the ingredients needed to build successful partnerships for development-related ICT projects. What are the criteria today? What are the challenges and opportunities, and how to work with the private sector and foundations? These were some of the questions presented to the panel by the moderator. Also discussed were [WSIS+10](#) and the stocktaking work done by [ITU](#).

The events were organized by [ICVolunteers](#), an international non-profit organization, with the support of technical partners and the *Organisation Internationale de la Francophonie* ([OIF](#)).

PROGRAM

14:00–14:20 Welcome Conference

- Opening remarks: Ms. Viola Krebs, Executive Director, [ICVolunteers](#)
- Opening remarks: Mme Arame Diaw-Diop, Responsable de suivi et d'évaluation de projets, Fonds Francophone des Inforoutes, Organisation Internationale de la Francophonie ([OIF](#))
- Opening remarks: Mr. Jose María Díaz Batanero, Coordinator, Inter-Sectoral Activities, International Telecommunications Union ([ITU](#))

14:20–15:30 Ongoing Initiatives: Communication, ICT and Development

- Colonel Souleymane Ndiame Guéye, Director of the [National Civic Service of Senegal](#), Agricultural Volunteers of Senegal
- Mr. Moustapha Ndiaye, Sustainable Neighbors Networks/Center for ICTs Capacity Building ([SNN/CCC-TIC](#))
- Mr. Shindouk Mohamed Lamine, [Oulad Nagim Association in Mali](#)
- Mr. Swithin Mutaasa, [Bwindi National Park](#), cybervolunteer, Uganda
- Ms. Céline Castiglione and Mr. Filmon Abraha, [University of Geneva](#), Switzerland
- *Moderator:* Ms. Viola Krebs, [ICVolunteers](#)

– 15 minute Coffee Break –

15:45–17:00 Best practices: agriculture for tomorrow?

- Mr. Ousman Aly Pame, Mayor of [Guede-Chantier](#) and Professor at the [University Cheikh Anta Diop](#), Dakar
- Namory Diakhate, ICVolunteers-Senegal
- Dr. Lucas Luisoni, [hepia](#) (Haute Ecole du paysage, d'ingénierie et d'architecture de Genève, filière agronomie)
- Mr. Michael Riggs, Food and Agriculture Organization of the United Nations ([FAO](#))
- *Moderator:* Dr. Sigfrido Romeo, agronomist, [AgriGuide](#) and ICVolunteers

17:00–17:45 What are the ingredients for future projects and partnerships - requirements, interests and needs

- Professor Michel Oris, Institut de Socioéconomie, [University of Geneva](#)
- Ms. Arame Diaw-Diop, Responsable de suivi et d'évaluation de projets, Fonds Francophone des Inforoutes, Organisation Internationale de la Francophonie ([OIF](#))
- Ms. Kim Jeoung Hee, International Telecommunications Unions ([ITU](#))
- Mr. Fernando Terry, [Ecotransferts](#)
- *Moderator:* Mr. Nazir Sunderji, [ICVolunteers](#)

17:45–18:00 Conclusions and Next Steps

Interpretation English-French

-- Cocktail --

Expected Results

Building “win-win” partnerships and solutions, involving academic institutions, non-governmental and international organizations, as well as other partners such as the private sector.

DISCUSSION SUMMARY

Welcome Conference

Ms. Viola Krebs extended a welcome to the room and introduces ICVolunteers in connection with African initiatives. Referring to the morning session of the Knowledge Volunteers meeting, she recalls the idea and importance of bridging the generation gap by means of communication. In relation to the ICT for Africa projects, the challenge of communication lies not only in the generational divide but also the fact that the rural communities are largely illiterate. This is a central concern in ICT for Africa work.

When the E-TIC program¹ was initiated five years ago, the question of how to use available technologies was raised. This roundtable has been arranged to present the achievements made over the last five years, as well as to suggest approaches for future work among existing partners and in forming new partnerships.

Opening remarks were presented by Ms. Arame Diaw-Diop (*Organisation Internationale de la Francophonie*²) and Mr. Jose María Díaz Batanero of International Telecommunications Union (ITU)³.

Ms. Krebs began the discussion with a brief presentation of the E-TIC Sahel InfoHubs project, the project's objectives, the locations in which it has been conducted (Senegal and Mali) and the vocations of focus (farmers, herders and fishermen). Key points are the agriculturally-based economy, the low degree of literacy in both Senegal and Mali and the specific regions of field work to date. Some challenges have been noted, such as the scarcity of electricity, the multitude of different languages spoken in the areas and the difficulty involved in circulating information. As a solution to these challenges, radio, mobile phones and computers are at the heart of efforts of the project.

The representatives from ITU and OIF are invited to briefly introduce their organizations and make the connection to the project, as well as to mention challenges ahead.

Mr. Jose Maria Diaz Batanero briefly introduced ITU, UN agency in which the policy makers and the industry can meet to contribute and collaborate on policy and agreements. Now a forward-thinking and problem-solving organization, ITU has also led the World Summit on the Information Society (WSIS)⁴ and coordinates its follow-up process, among other things through its annual WSIS Forum⁵. WSIS+10 is coming up in 2015, after the summits of Geneva and Tunis (2003 and 2005). Since ITU uses a multi-stakeholder approach, involving governments, civil society and the private sector, the organization values contributions and the participation of entities such as ICV, organization that has been active in the process since the very beginning of the latter and has been the laureate of the WSIS prize for one of its programs last year.

¹ <http://www.e-tic.net> and <http://www.agriguide.org>

² <http://www.francophonie.org>

³ <http://www.itu.int>

⁴ <http://www.itu.int/wsisis>

⁵ <http://www.wsisis.org/forum>

Ms. Arame Diaw-Diop of OIF explained that the *Fonds Francophone des Inforoutes* supports digital literacy in francophone countries across the globe through project funding. Since its creation in 1998, the Fund has supported 220 projects for an amount of EUR 17,700,000. It seeks to encourage multilateral partnerships. After a brief presentation of the organization's structure and the selection process of the *Fonds Francophone des Inforoutes*, Ms. Diaw mentioned the importance for organizations seeking funding to carefully consider all guidelines given, as it happens just so to often that due to small errors potentially sound projects will not be considered in the final funding process and selection.

Ongoing Initiatives: Communication, ICT and Development

A video was shown to illustrate the E-TIC: Sahel InfoHubs project: "*E-TIC Formations des Volontaires de l'Agriculture du Sénégal*"⁶.

The session that followed focused on concrete projects related to knowledge sharing, ICT and development within various sectors in Africa. The speakers, both physically present in the room and others connecting from Senegal, Uganda and Canada (representative from Mali), shared their experiences, with a particular focus on the "E-TIC: Sahel InfoHubs project" related to agriculture, fishing and husbandry in Senegal and Mali. The session also presented the experience of Bwindi National Park and its telecenter in Uganda, as well as the Ethical Fashion project, starting in Ghana.

Colonel Souleymane Ndiamé Guéye of National Civic Service of Senegal (SCN)⁷, on the line from Dakar, provided background information about the National Civic Service:

- More than 1,500 young Senegalese are trained in farms throughout the country, which is made possible by this program. After training, they are given the necessary tools and equipment and work on local farms for two years. After these two years, they are ready to invest their skills and abilities in other places, disseminating useful information to other farmers and livestock herders.
- Relay points are important for success and progress. People in the field who are able to relay information can provide farmers with information that is crucial to their trade and domain. Examples include weather forecasts that may help to avoid certain natural catastrophes.
- One major benefit of the program is its ability to reduce the exodus of inhabitants by allowing information to improve daily lives and the standard of living in existing communities. Additionally, the program is a way to develop the citizens' awareness, and ultimately to help community members become more active citizens.
- The E-TIC: Sahel InfoHubs project in Senegal trained agricultural volunteers providing them with an introduction to the use of computers and data collection. It is Colonel Gueye's hope to further expand this collaboration in order to include all regions of the country and all agricultural volunteers.
- As the program progresses, it will be important to ensure youth continue to be involved. These young people are able to bridge the info gap by providing relevant information in local languages.

Ms. Krebs invited questions from the room.

⁶ See:

http://www.youtube.com/watch?v=nA91n6k4Y5U&list=PL5318D1B8C767EAF0&index=4&feature=plpp_v_ideo

⁷ <http://196.1.94.30/portail/index.php/site/showAgence/id/3>

Question: How can a young Senegalese take part in this service?

Colonel Guéye responds: The program is open to all men and women between the ages of 18 and 35. For volunteers in agriculture, the ability to read and write is sufficient; a higher level of education is necessary for "information relayer" positions. In both cases, the volunteers need to be very committed, ideally unmarried. There are currently 10,000 young Senegalese signed up, but due to financial constraints, only 300 can be trained at a time/per year as volunteers.

Question from Dr. Ousmane Aly Pame: How does a community get to benefit from the support of SCN?

Colonel Guéye responds: The community must discuss the availability of land with the rural council. There must be enough land and water available for the program to be carried out.

Mr. Moustapha Ndiaye, engineer in computer sciences and head of the Center for ICTs Capacity Building in Yoff, Senegal, presented two ICT initiatives in which he has been involved in:

1) *Le Système d'Information des Collectivités Locales (SIPeey)*⁸:

- The project focus is to create a network of sustainable neighborhoods, through the training of students and volunteers.
- Once students are trained in all necessary aspects of website creation, they are asked to create websites within and for the 14 regions of Senegal. An example of a program website is presented.
- The program began in 1997 with participation from local communities that received help from the mayor and rural councils. Objectives and activities were established to train people who will then become trainers to others in their specific center.
- Although students finance their own participation, external supplementary funding is necessary and made available.

2) The first ICT seminar organized for the National Civic Service in Senegal:

- The training session was organized in Dakar in April 2010. An introduction to navigating the Internet and Skype was covered on day one, followed by a review and questionnaire on day two, and then a presentation of the E-TIC portal and questions from the participants on the final day of the seminar. The purpose of the training session was to clarify which technological tools are available and how they can be used to promote communication and help small farmers, herders and fishermen sell their products. The introduction also touched on the data collection to be done in different localities throughout Senegal and their imputed into the computer in a decentralized fashion.
- Ultimately, the E-TIC project trains volunteer workers to relay information by updating and maintaining a comprehensive website with market prices, articles and videos on the subject of agriculture. Once the volunteers are trained, they can help train new volunteers in these roles.
- Areas where the project can bring added value include market information, greatly lacking, and information on good practices. It works with and finds ways around the fact that the degree of literacy is low within the communities.

Question: Please clarify the objective. 10,000 people were elected and these volunteers are meant to train others? What happens after training?

Mr. Ndiaye responded: The students receive vocational training, in areas such as website creation and computer repair, which helps them build their professional curriculum. With their volunteer experience, young people are given an advantage in the job market, and many have

⁸ <http://www.sipsenegal.org>

even created their own companies after receiving their training. After their training, some volunteers are also hired by local organizations as communication experts or field connectors in rural communities.

Ms. Krebs introduced **Mr. Shindouk Mohamed Lamine**⁹, the representative of ICV in the Timbuktu region, and explained how they met in the city of 703 saints when she traveled there in 2003, trying to understand in practical terms what the digital divide was all about. A documentary was made about the topic which was later shown at the World Summit on the Information Society in Geneva in December 2003 in the presence of Mr. Lamine. After an enriching exchange of information, Ms. Krebs and Mr. Lamine continued their collaboration in the context of different initiatives, the latest of which is the E-TIC Sahel InfoHub project. Shindouk is currently in Canada due to the situation of instability and unrest in the North of Mali. After trying to establish the connection, as successfully done the previous day, it was as impossible to do so within the time-frame given.

The following elements have been integrated based on a conversation which took place after the conference itself: In the Timbuktu region, according to the field study conducted in 12 villages, farmers generally agree that the best method of cultivating the soil is to farm with bio methods, this is, to go back to old and traditional methods that have been used in the past. Farmers also noted that this requires technical advice and a lot of work especially at the beginning of the process. Thus, in the words of Shindouk, what is needed is sharing of knowledge on how to best go about the change. There is always a problem of resources, in either case, but with the bio methodology at least there is no need to add to the overall bill hospital and dispensary consultations for children who got sick because of pesticide poisoning.

Mr. Swithin Mutaasa, cybervolunteer, presented a slideshow on ICT in and around Bwindi National Park, located in the remote region of southwestern Uganda:

- Conservation through Public Health (CTPH)¹⁰, a local non-profit organization, focuses on gorilla conservation through peaceful co-habitation, wildlife monitoring, and improvement of communication for individual and communal well-being. Considering the remote location in this area of Uganda, destructive and selfish behaviors have become ingrained in the community. Swithin, placed in CTPH by ICV's CyberVolunteers program, had as a mission to assist the center with IT-related tasks and to teach the organization the use technology to improve this reality.
- The role of the cybervolunteer included web design and compiling the e-newsletter, maintaining the members' database and ICT skills training.
- Challenges of CTPH center around program costs: high connectivity costs, the high cost of computing equipment and the high costs of power. Despite the low literacy levels in the area, there is a thirst for information and technological improvement.

Ms. Celine Castiglione and **Mr. Filmon Abraha** of University of Geneva presented their work on the Ethical Fashion project¹¹. In the interest of improving lives in different sectors of the economy, these two students have conducted research and a consumer study related to ethical fashion in connection with the textile sector in Ghana:

- Background and history of the textile industry in Ghana is provided. The movement to transform the agricultural economy to a modernized, multifaceted economy in the 1960s and 1970s by growing the textile sector gave way to a focus on cheap textile imports from

⁹ <http://www.shindouk.org>

¹⁰ <http://www.ctph.org>

¹¹ <http://www.e-tic.net/index.php?what=aprojects&id=172>

Asia in the 1980s. Given China's huge advantage in the textile industry, textiles produced in Ghana have a hard time competing.

- These debilitating consequences for the Ghana textile sector have led to a collaborative program for ethical fashion in Ghana, supported by ICVolunteers and a variety of other partners, including the International Trade Center (ITC), ECOs and Helvetas, and financed by SECO of the Swiss Government. The aim of the program is to secure higher wages for Ghanaian manufacturers.
- A central issue of the project surrounds whether or not there is a European market for Ghanaian textiles. A survey was conducted to evaluate the Swiss market's reception to ethical fashion from Ghana. Results indicate that ethical fashion would appeal to European consumers, though the price does play a major role in consumer choice.
- The next step will be to interview consumers, along with large distributors and smaller boutique stores with the aim to open lines of communication between them for ethical product discussion. A trip to Ghana has been arranged for November 2012 to confirm that the data collected in the study responds to the real needs of Ghanaians.

Question: How is the ethical element integrated in this project?

Ms. Krebs responded: The project is based on a multilateral partnership among several organizations. Based on its experience in Kenya, the lead agency, the ITC has chosen to focus on an approach seeking to create collaborations with big Swiss, European and American stores. This in turn means that the products need to correspond to expectations of these sales outlets as well to their clientele. While the particular approach could be the basis of a long discussion, the purpose of the present session is more to look at how the communication tool box developed by ICV can and should be used in this particular context.

The room agreed that African clothing craftsmanship is superior to the often cheaply produced Asian and European garments. Speakers stressed that the main purpose of the discussion was to look at methodological issues rather than qualitative assessments related to the textile industry and its quality control and approach.

Best Practices: Agriculture for Tomorrow?

Dr. Sigfrido Romeo, agronomist and contributor to the AgriGuide¹², introduced the topic for this session: The AgriGuide focuses on sharing and adopting environmentally and economically beneficial practices in Senegal and Mali. When establishing the way forward, it is important to consider the health and value of each partner and sector involved in Western African agriculture. A video¹³ is shown to illustrate the AgriGuide's principles, and the images that are used as communication tools to explain good agricultural practices to farmers.

Question from the floor: How is the AgriGuide disseminated? Is it distributed in paper format?

Ms. Krebs responded: The AgriGuide was created in a couple of stages. The idea first arose from the awareness campaign conducted in the Timbuktu region, where farmers had specific questions with regard to good and sustainable farming practices. The guide lists major crops and includes also information about herding and fishing as well. It is specifically adapted to provide hands-on guidance to the rural populations. An English version of the guide was completed in April 2012, followed by the French publication which followed in July, and the report on the findings is currently being drafted, but an examination of the harvest is the only way to truly test the outcome of the initiative. Once the first edition finished, it was shared with some farmers in Guédé-Chantier and Richard Toll (Senegal River Valley area), beginning a dialogue in which

¹² <http://www.agriguide.org>

¹³ See <http://www.youtube.com/watch?v=EsPFjF3b-o8&feature=relmfu>

many questions were fielded. This response required a close examination of what information needs to be communicated on pesticides and their use in agriculture.

Dr. Ousman Aly Pame, Mayor of Guédé-Chantier¹⁴, shared a personal story illustrating the destructive and dangerous nature of pesticide products. There are many issues and tragedies involving hazardous products resulting from a lack of information, and the large level of illiteracy in the communities makes this a very serious and complicated problem. A primary step to overcoming the communication challenges is to further circulate the AgriGuide video in order to clearly communicate the dangers of pesticides to the farmers who use and abuse them.

Dr. Aly Pame, currently the youngest Mayor of Senegal, illustrated the agricultural situation in Senegal with a reference to China's introduction of rice and pesticides in the 1970s. After the Senegalese government chose to extend farm land through the whole valley, the trees were cut down and the forests replaced with rice fields. The runoff from the pesticides brought toxins into the river, infecting the fish and subsequently destroying the fishing industry. The devastating legacy of this rice crop introduction and pesticide use is difficult for the farmers to overcome, and many are saddled with large and unyielding debts to the banks. In order to service their debts, they are forced to grow the crops prescribed by global demand rather than foods that they can themselves eat.

Question from Dr. Romeo: What are the challenges we face as facilitators in joining the organic agricultural movement?

Dr. Aly Pame responded: Communicating to the farmers remains the biggest challenge of the move to an organic farming system. However, it is also important to help establish a fair relationship between the farmers, the banks and the State. Finally, changing the vision of the farmers and their habits is necessary to maintain such a system; the facilitators can help the farmers see the whole chain of production and the benefits they can reap, which will urge more sustainable practices that ensure the well-being of the ecosystem, which includes both the land and the people.

Question from Dr. Romeo: How can communication tools help to empower farmers?

Dr. Aly Pame responded: If families had access to copies of the illustrated version of the AgriGuide, they could better understand the results of their actions. Also, the huge enthusiasm among youth is a great resource. Perhaps a center could be built or assigned to present agricultural films and hold talks for the community. This would be a good avenue for dissemination, especially when it is too hot to farm and the farmers have time to spend away from their fields.

Question from Dr. Romeo to Prof. Lucas Luisoni: What can ICT do for the agricultural sector?

Prof. Lucas Luisoni of hepia (*Haute Ecole du paysage, d'ingénierie et d'architecture de Genève, filière agronomie*) responded: Access to fresh water is a current concern among farmers, and rural zones are facing difficulties in other areas, such as food security. ICT should address the problem of dependency by helping farmers become self-sufficient producers and granting local markets more authority. It is crucial that with today's market fluctuations, farmers acquire more economic knowledge and expertise.

Mobile phones have proven to be of enormous value in rural areas, both for immediate communication and as a tool for gaining literacy. They should be used as tools to transmit information, along with images and illustrations.

¹⁴ <http://www.guedechantier.com>

Mr. Namory Diakhaté, ICVolunteers representative in Senegal, was invited to the conversation via Skype.

On the subject of pesticides, Mr. Diakhaté explained that it is difficult to assess the extent of effects on health because results can take a long time to manifest. However, there has been some extreme toxicity traced to pesticides, particularly in the waste water that contaminates other water sources which then travel into households.

On the subject of the AgriGuide's impact, the community response has been positive. The drawings were appreciated, though the message could perhaps be improved with more drawings. There were some issues with understanding, mainly due to low literacy, which means that the role of literate field connectors is fundamental. A follow-up to the initial guide was requested.

Question from Dr. Romeo: In your opinion, what other challenges will the AgriGuide face in the future?

Mr. Diakhaté responded: Since clarity in communication continues to be an issue, the AgriGuide needs to provide explanations to accompany illustrations. Also, results must be more apparent and there must be a closer connection between the advisers and the farmers. Instead of simply offering information, the farmers have expressed interest in working with the advisers in the field in order to receive better guidance.

Prof. Luisoni responded: Having worked in the Sahel in the 1980s, he notices how different today's crops are when he visits the region. Focus in agriculture has shifted to the market and the economy, and farmers have started to become spectators. Dr. Aly Pame reminded the audience that in Senegal, the main export crop was peanuts at one time. Today, there are many different crops grown in greenhouses for export to Europe. He also noted that rice which is being grown is not very profitable. These crops were beginning to be grown in the 1980s.

Prof. Luisoni stated that some farmers may need to speculate, as they do not know if they will be able to earn enough for their crops. International markets will distort prices, making African crops more expensive than Asian crops and a mechanism of world exchange cannot exist based on modern realities.

Dr. Aly Pame responded: One solution to the problems with African crops may be to grow flowers for export instead of rice. In respect to how ICT can help the situation, relay points are excellent tools to spread and disseminate information. Theater also might be a good medium for communication, as it promotes a cultural facet that many Senegalese enjoy. Ultimately, the best way to overcome and avoid some of the challenges ahead is to empower the farmers and producers in the region.

Question from Dr. Romeo to Mr. Michael Riggs, FAO: How can ICV's initiative complement your efforts in ICT and agriculture?

Mr. Michael Riggs responded: ICV's initiative serves as a tool to improve food security and the networking of people in the field as a means to combat hunger. Unfortunately, there is no appropriate supporting policy in some areas, and this must be remedied. Telecommunications must create an enabling environment and opinions and suggestions from all sectors must be considered and compiled to improve the policy.

Mr. Riggs introduced the e-Agriculture community, including the partners and key issues, through a series of slides. He suggested that the best tool for extending communication networks in Africa today is the mobile phone, as it has the capacity to connect rural

communities and improve food security. In turn, there should be more research done around low cost and low energy solutions to make cell phone use a viable solution.

Question from Ms. Diaw-Diop: What is the role of micro-financing institutions in the elevation of organic products?

Prof. Luisoni answered: Micro-financing elements are very useful, but should not be relied on entirely. Dr. Aly Pame indicated that, from his point of view, that banks giving micro-credits are just as problematic as big banks.

Overall questions at hand are the following:

- The challenges in involving farmers in adopting best practices;
- The role of the communication tools;
- What else is needed to empower farmers to have their voices heard?
- The role of volunteers, women and youth in agriculture/ICTs;
- The role of agriculture best practices in addressing climate change in West Africa;
- Lessons learned with some examples;
- Policy and market development in West Africa;
- Way forward on agriculture best practices by using communication tools;
- Financing: involving the private sector and research institutions.

Ingredients for Future Projects and Partnerships: Requirements, Interests and Needs

Mr. Nazir Sunderji introduced the panel and began the discussion of future work and funding. Successful E-TIC and AgriGuide¹⁵ initiatives will necessitate future partnerships, but the economic fall of 2008 has made funding more difficult, bringing issues of accountability and transparency to the forefront. What will donor companies and organizations look like 10 years from now, and how will projects need to approach potential funders?

Prof. Michael Oris, *Institut de Socioeconomie* at the University of Geneva¹⁶, explained that the current financial situation is difficult, given that capital of many worldwide foundations has decreased. Subsistence farmers have become consumers, too, and this contributes to economic fragility. However, joint voluntary initiatives could be solutions to funding challenges. An example of this type of partnership is the UN drinking water initiative where water services in and around Geneva joined efforts to become a “brother” company to an African enterprise. In this case, it was not too expensive to carry out the project and important skills were learned and shared with African partners. The agricultural knowledge is high in the Canton of Geneva, and many people would be very happy to contribute to a development project in Africa. This would surely be a fruitful partnership for all parties involved.

Mr. Fernando Terry, Ecotransferts¹⁷, stated that there is currently an intensification of the transition to a green economy, with goals to drastically reduce various emissions by 2020. Although the will behind this movement is strong, people must also be trained to implement the policies. However, there is a question of taxes and costs attached to water, pollution and other environmental aspects that could necessitate a new type of agriculture and production. It will be important to consider the opportunities that a transition towards a green economy will bring for both local and the global markets.

¹⁵ <http://www.agriguide.org>

¹⁶ <http://www.unige.ch>

¹⁷ <http://www.ecotransferts.ch>

Ms. Jeoung Hee Kim, ITU¹⁸, highlighted three elements needed to implement successful projects and partnerships: collaboration, using and contributing to shared information, and setting up an enabling environment. She introduced the WSIS Forum¹⁹ and its affiliation with ICVolunteers as an example, noting that this kind of partnership has been important for number of years. The WSIS Forum 2013 will take place in May in Geneva, and will bring together all stakeholders to share ideas and experiences for their successful projects. The themes and agenda will be decided through an open consultation starting in October 2012. Ms. Kim further invited participants to consult information about the WSIS Forum which is available online. Public feedback and platforms for networks and communication, such as the WSIS Stocktaking platform, are vital if the WSIS declaration and plan of action²⁰ are to proceed in the most effective way. As others have stated, an enabling environment must be also created for the farmers within their communities, but this can only be achieved with the help of public feedback. ITU, UN Specialized agency for ICTs, provides an excellent platform to work at the international level.

Ms. Arame Diaw-Diop, OIF²¹, offered a funder's perspective to the discussion, expounding on the three ways to determine whether or not a project will be funded:

- *Details within the application:* In many cases, projects are dismissed simply because small details have been left out of the project application. In fact, for the 2012 selection, 33 of 93 files were eliminated for this reason. It is therefore crucial that applications are filled out thoughtfully and carefully.
- *False partnerships and unbalanced distribution of funds and work:* Funding will not be given to projects in which one partner is favored over others, as the Fund strives for fair, balanced and proactive relationships within projects.
- *Project changes and redesign:* The project can only be altered or re-designed with permission and help from the Fund. Communication with the Fund is important to overcome obstacles and deal with difficulties. Lack of communication from the project directors will be perceived as lack of interest, and trust will be lost. Open communication must be maintained to sort out difficulties and maintain trust between the project and the funder.

All relationships with projects featured in today's roundtable are healthy, and it is hoped that these projects will continue to succeed and expand into other countries. There are funds available for future projects. Keys aspects of the revised plan will include support for innovation strategies in other countries, internships for youth, and a focus on transparent and democratic processes. Feedback is welcomed.

Ms. Kim reminded the room that there are WSIS prizes awarded to exceptional projects each year. ICVolunteers²² has earned the 2012 WSIS prize for its GreenVoice project²³.

The question on how to build relationships with donors was raised. Mr. Sunderji suggested that, though money is important, the notion of time and knowledge should be exploited. Partnerships and casual volunteering often lead to deeper relationships and larger movements, and organizations need to remember to work with the donor agency, not just for their money. Ultimately the most important rule to secure donations is to research the donor agency and

¹⁸ <http://www.itu.int>

¹⁹ <http://www.itu.int/wsis/implementation/2013/forum/>

²⁰ <http://www.itu.int/wsis/index.html>

²¹ <http://www.francophonie.org>

²² <http://www.icvolunteers.org>

²³ <http://www.greenvoice.info>

work within the framework it has set for applicants. Transparency, accountability and an emphasis on green initiatives will become more important, and projects should fall in line with these principles if they seek funding.

Ms. Krebs thanked all the volunteers who helped with the conference and Mr. Sunderji, who has been a key adviser for ICVolunteers. She also thanked all the guests and participants for their presence and active contribution. Last but not least, she pointed out that the interpretation booth had two new interpreters among whom was Dr. Aly Pame, who took over interpreting duties for the final discussion of the roundtable. The conference was concluded at 18:30.

Conclusions and Recommendations

Recommendations stemming from the discussions can be centered around four main points:

1. **General recommendations;**
2. **Agricultural practices:** the adapting and active use of the AgriGuide and other similar tools in a context of oral and very local communities;
3. **ICTs and communication tools:** the further use of technology in different areas of economic development, in general, and the use of the E-TIC toolbox, more specifically;
4. **Partnerships:** the partnerships built with technical and financial institutions to make the implementation of projects such as those presented during the roundtable a reality.

General recommendations

Localized, indigenous knowledge management systems have to be created. The AgriGuide has to be supplemented by traditional experiential knowledge to create a durable, indigenous knowledge management system owned by the target communities.

As it was already done for the E-TIC Sahel InfoHubs project, any further initiatives should target the inclusion of women and girls. It is to be noted that so far most ICT initiatives do not adequately address gender imbalance in rural communities yet about 80% of farmers in Africa are women. If we put emphasis on women therefore, we are certain to meet the transformation of the rural communities.

Use of the AgriGuide and other similar tools

The adapting and active use of the AgriGuide and other similar tools in a context of oral and very local communities:

The AgriGuide developed for Senegal and Mali is not a direct solution to food insecurity but rather a communication tool which contributes to the understanding of food security at the community level. The input provided by the panelists and the floor reflects the following recommendations:

- Increasing the understanding of best practices in agriculture through radio messages, advertisement, drama, cartoons;
- Providing capacity building and technical assistance to farmers and local government officials in the field.

Use of technologies and the E-TIC toolbox

Strive towards an enabling environment for communication policy development at government level.

It is necessary to integrate appropriate interactivity solutions for community feedback in order to encourage community participation. This ensures continuous amelioration of the information contained within the guide as well as reducing the community's resistance to the whole initiative.

These solutions must be at no cost to the target community. This could be temporary low cost, fast-setup GSM networks such as Range Networks' OpenBTS.

More emphasis needs to be placed on mobile information dissemination solutions (mobile – phone). This is because mobile penetration is quite high even in rural areas.

No one ICT solution can be implemented in isolation. A working mix of the technologies has to be rolled out to address the information challenges:

- Telecenters in rural areas greatly facilitate and encourage information dissemination. Telecenters should be emphasized because they are a remarkable stimulant for knowledge sharing and positive change in remote, rural communities
- The challenge of Literacy: students in rural communities invariably have strong connections/ ties within their community. Because of the challenge of low literacy, sustainable Telecenter models need to be established at rural literacy centers such as schools. This would also help to address the "last mile" challenge - Where the students help to take the information back home.
- Easy access to communication tools allows civil society to organize better themselves in order to have access to the policy dialogue and to definition of development priority for their environment.

Partnerships

- Forging new and diversified partnership with stakeholders such as micro-finance and research institutions, as well as the private sector.

PART II:

APPENDIX

APPENDIXES

Appendix 1: Biographies of Speakers

Filmon Abraha, University of Geneva and ICVolunteers



Filmon Abraha, a recent graduate of the University of Geneva holds a master's degree in Socio-Economics and a BA in International Relations. He is currently working as part of a course for ICV in the Ethical Fashion project, which takes place in Ghana and aims to promote fair trade and an ethical fashion approach between Swiss and international retailers and micro-producers from marginalized communities in Ghana. Prior to joining ICV, Filmon worked for HSBC Private Bank and as a communication assistant for the United Nations.

Céline Castiglione, University of Geneva and ICVolunteers



Céline Castiglione also works as an intern for ICV and is currently finishing her master's degree in Socio-economics at the University of Geneva. She holds a master's degree in Environmental Science and a BA in Economic and Social History, Céline Castiglione previously worked for the association Norlha - Help the people of the Himalayas as a communication assistant and for Covalence as an ethical information analyst.

Arame Diaw-Diop, Fonds Francophone des Inforoutes, International Organization of Francophonie



Arame Diaw Diop is the project evaluation and monitoring officer of the *Fonds Francophone des Inforoutes*, a financing program of the International Organization of Francophonie. Previously, she was an editor for the French Ministry of Foreign and European Affairs. She has a Masters degree from the University of Paris in Political Sciences.

Namory Diakhaté, ICV representative in Senegal



Namory Diakhaté is the ICV representative in Senegal. He has experience in sustainable development projects in rural and urban areas. Namory Dikhaté holds a degree in Letter, literature and culture of English-speaking countries at the University Cheikh Anta Diop in Dakar. He is currently following the Global Master in Development Practices and also attended a semester of practical training in sustainable development at the University of Massachusetts. Finally he did his voluntary service with Earth Rights Eco-Village Senegal.

José María Díaz Batanero, Coordinator, Inter-Sectoral Activities, International Telecommunication Union



José María Díaz Batanero is coordinating the business strategies for the International Telecommunication Union. Holding a Master degree from the University Carlos III of Madrid, he worked for the Inter-American Development Bank and the United Nations Development before joining ITU.

Viola Krebs, Executive Director, ICVolunteers



Viola Krebs is the Founder and Executive Director of ICVolunteers. With a background in socio-linguistics, she has many years of experience with international project management in the field of communications and media, including in a development context (Africa, Latin America and Asia). Viola also teaches at University of Business and International Studies (UBIS) and is a member of the Strategy Council of the United Nations Global Alliance for ICT and Development (GAID). She chaired several international conferences, and served from 2003 to 2005 on the Civil Society Bureau of the World Summit on the Information Society (WSIS). She has worked in both the public and the private sectors, including for People Living with HIV/AIDS (PWA), the World Economic Forum (WEF) and Merrill Lynch. Viola is a Swiss national and holds a Masters in Communications and Media, a Bachelor in Linguistics, Spanish and English of the University of Geneva.

Kim JeoungHee, ICT Analyst, International Telecommunication Union



Ms. JeoungHee KIM is an ICT analyst in the Corporate Strategy Division at the International Telecommunication Union (ITU). As an ICT analyst, she provides ICT legal and policy analysis and proposals on various activities of the Union, and identifies key issues and trends to be followed up.

Shindouk Mohamed Lamine, ICVolunteers Mali



Shindouk Mohamed Lamine is the representative of ICV in the Timbuktu region and has actively contributed to the development of E-TIC project in the region. He has ten years experience in tourism and a lifetime of experience in the deserts of Mali, Algeria, Mauritania, Niger, and Libya. He is also the only Berabish Tuareg in tourism and chief of his tribe, the Oulad Najim. The profits of his own work go directly or indirectly to help his community. When he isn't drumming up money to put in a well, a school, a dispensary in their territory North of Timbuktu, he is using his contacts to see that some of the food aid makes it out there to people in serious need. With his earnings he purchases grain or animals to help rebuild the herds decimated by droughts and the rebellion.

Lucas Luisoni, agronomist, professor at hepia



Lucas Luisoni is an agronomist, graduated from the Ecole Polytechnique de Zurich (EPFZ) and holds an MBA from the University of Geneva. After a year of research at AGROSCOPE, he worked for 12 years in Africa and Latin America in development projects and cooperation programs with the Food and Agriculture Organization of the United Nations (FAO) and the Swiss Agency for Development and Cooperation (SDC). Back in Switzerland, he held positions at management level within an NGO, a multinational company and the public sector. He has also worked as an independent consultant. Today, he is lecturer at HES / hepia in the agricultural sector. He also teaches in the Mechanical Engineering sector. In addition, Lucas Luisoni teaches negotiation and change management within the Executive MBA ESM / Business School Lausanne. In 2010, he created the Sàrl "Giving meaning" to manage, among other mandates: management of organizations, development and cooperation project evaluation, negotiation and business management in multicultural environment and adult training.

Swithin Mutaasa, cybervolunteers, Bwindi National Park



Serwadda Swithin is an ICT Expert/ Development Professional with over 12 years' experience across the social development and humanitarian fields. He has previously worked as international ICT Manager in Sudan and has been trained in IT Management in Emergencies (World Food Programme). Currently he is an independent Consultant engaged in IT development and integration functions, ranging from Web design and development, Database, and Data management, to networking and ICT skills training. He also works as a volunteer Advisor on sustainable and appropriate ICTs in pedagogy for Tropical College, a secondary school in the marginalized eastern district in Tororo, Uganda.

Colonel Souleymane Ndiame Guéye, Programme Administrator, National Civil Service of Senegal



Colonel Souleymane Gueye Ndiame is the director of National Civic Service since August 2001. He was an observer of the Organization of African Unity (OAU) in Democratic Republic of Congo under the Lusaka Agreements in November 1999. Formed to peacekeeping in Ghana in 1997, he participated as a liaison officer in Lebanon in 1982 under the United Nations Interim Force in Lebanon (UNIFIL). Trained at the Ecole Navale in France, he has an engineering degree in propulsion power in Toulon in France. He also holds a Bachelor Series S (scientific) and a degree of scientific study (Université Cheikh Anta Diop, Dakar).

Moustapha Ndiaye, SNN/CCC-TIC



Moustapha Ndiaye is an engineer in IT and Electronics. Based in Dakar and holding a Master 2 in Networks and Telecommunications, he is currently Director of the Training Centre for IT CCC-ICT (Capacity Building Centre for Information and Communication). He is also the project coordinator for the creation of Sustainable Training Centres in IT and Web Sites for local communities in Senegal.

Michel Oris, professor at University of Geneva



Michel Oris is professor at the Faculty of Economic and Social Sciences at the University of Geneva since March 2000. Doctor of Philosophy and Humanities (History) from the University of Liège (Belgium) in 1991, he was a researcher at the National Fund for Scientific Research from 1985 to 2000. His research interests include family demography, interactions between individual trajectories and dynamics of social structures, demographic responses to economic stress, vulnerability, and the course of life, condition of lives of the elderly. Member of the editorial board of the Journal of Historical Demography of Advances in Life Course Research and Belgian Journal of contemporary history, is the founder and director of the collection Population, Family, and Society - Population, Family and Society in Peter Lang. He is director of the Interfaculty Centre for Gerontological Studies and vulnerabilities since 2007. He is also co-director of the National Center 'LIVES. Overcoming Vulnerability. Life Course Perspectives "and member of the steering committee of the Institute of Demographic Studies and Course of Life (I-Demo).

Ousmane Aly Pame, mayor of Guédé-Chantier



Dr. Ousmane Aly Pame is the mayor of Guédé-Chantier, a commune located North of Senegal and has been elected during municipal elections in 2009. Dr O. Aly Pame is also an Associate Professor at the Department of English at Cheikh Anta Diop University where he has been teaching translation, English civilization and literature for the past four years. He taught French language and Senegalese literature at the Department of French at Exeter University (United Kingdom). Dr Pame has also taught business English at the Suffolk University Dakar Campus and at CESAG, a West African sub-regional management school. He has been actively involved in English language teacher's training seminars sponsored by the Senegalese Ministry of Education and the British Council.

Michael Riggs, Knowledge & Information Management Officer, FAO



Michael Riggs works for the Food and Agriculture Organization of the United Nations as a Knowledge and Information Management officer. His main areas of expertise are the use of information and communication technologies (ICTs) for agriculture, rural development and food security. In this context, he coordinates the e-agriculture.org website and works closely with a number of international partners. He holds a MA at Chulalongkorn University, Thailand.

Sigfrido Romeo, agronomist



Dr. Romeo Sigfrido is an expert agronomist and environmental biology graduate from the University of Malawi and hold a PhD in Science in Agriculture from the University of Palermo. With over 14 years of experience in Europe, Africa and Asia, including Afghanistan, Sigfrido Romeo has worked among others for the Ministry of Foreign Affairs of Italy, for the United Nations High Commissioner for Refugees, for the Aga Khan Foundation or as a consultant for the United Nations Development Programme (UNDP) and ICV. Thanks to his collaboration, Sigfrido Romeo greatly contributed to the development of the Agriguide, a tool allowing sustainable agriculture that explains how to use natural resources more efficiently while increasing revenues. It provides information on food and cash crops management for small-holder farmers, herders, and fishermen in Senegal and Mali.

Nazir Sunderji, Senior Advisor, ICVolunteers



Nazir Sunderji is serving as Senior Advisor and Financial Manager of ICVolunteers. He brings 30-plus years of international business, management, negotiating and diplomatic perspective. In the past, he served as the Director General of the Bellerive Foundation, founded and presided by the Late Prince Sadruddin Aga Khan, former High Commissioner for Refugees and Special Representative of the Secretary-General of the United Nations. He managed a part of His Highness' financial portfolio, and represented the Prince's interests at senior levels of Governments. In parallel, he has served on the Board of Directors of various national and international companies as well as various non-profit organizations. Before moving to Switzerland in 1984, he assumed several significant management and accounting positions at the United States Steel Corporation. Nazir is of Indian ancestry, raised in Africa, educated in the United States and has accumulated extensive experience from a European base.

Fernando Terry, Ecotransferts



After 17 years of experience in creating and managing projects related to international cooperation and employment, Fernando Terry joined the company "Essaim" to offer a support service for creating innovative projects in the field of green jobs and the transfer of clean technologies to developing countries. The consulting firm of Fernando Terry specializes in assembling projects following these two objectives: 1) Transfers of green technologies (Cleantech) to developing countries; 2) Integration of young people into professional companies in transition to a cleaner economy, both in Switzerland and abroad. Currently Ecotransferts works with Swiss and European organizations in order to mount a series of projects aimed at the development of green jobs. Several projects have been submitted to Swiss and European funds and are at the moment being validated.

Appendix 2: Presentation of Institutions

Ecotransferts

www.ecotransferts.ch

Ecotransferts is a consultancy agency designed to support the creation of Eco-projects. Its goals are to promote green jobs by supporting the transition to clean technologies, to assist companies in setting up projects for climate protection and their transition to the green economy. Ecotransferts supports customers in finding financing for their eco-friendly projects targeting the following objectives: 1) Reducing the environmental impact of the company; 2) Creating a project having an impact on climate protection; 3) Integrating an institutional network to share the evolution of Eco-projects. In this context, Ecotransferts can assist client companies in the steps of preparing their projects: Feasibility studies; Advice project structuring; Orientation in research of funding; Help in applying of call for tenders; Support in the implementation of the pilot phase.

FAO – Food and Agriculture Organization

<http://www.fao.org>

The Food and Agriculture Organization of the United Nations (FAO) is a specialized agency of the United Nations that leads international efforts to defeat hunger. Serving both developed and developing countries, FAO acts as a neutral forum where all nations meet as equals to negotiate agreements and debate policy. FAO is also a source of knowledge and information, and helps developing countries and countries in transition modernize and improve agriculture, forestry and fisheries practices, ensuring good nutrition and food security for all. Achieving food security for all is at the heart of FAO's efforts - to make sure people have regular access to enough high-quality food to lead active, healthy lives. FAO's mandate is to raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy.

Hepia – Haute école du paysage, d'ingénierie et d'architecture de Genève

<http://hepia.hesge.ch>

The network of universities of applied sciences (HES) is one of the three pillars of higher education in Switzerland along with the Ecoles Polytechniques and Universities. The Engineering School of Lullier belongs to the University of Applied Sciences of Western Switzerland (HES-SO) and has nearly 12,000 students from seven Swiss canton. The school offers three different specializations: (1) Agronomy - Horticulture and Special Productions, (2) Landscape Architecture, (3) Nature Management. The agronomy branch is based on the production of innovative goods: products of ornamental horticulture and food. Particular attention is paid to respecting the authenticity of products and soils. Training attaches particular importance to sustainable development (horticultural waste management, soil, air and water protection, LCA) without excluding economically viable production and of quality. The field of management of nature meets the needs of a market looking for practitioners of the environment. Conservation, management and development of natural heritage are at the heart of this training. The *Centre d'enseignement professionnel de Lullier* (CEPL) offers three types of training for young people who completed their compulsory schooling: 1) School of Horticulture; 2) School for florist; 3) A dual training.

ICVolunteers

www.icvolunteers.org

ICVolunteers (International Communications Volunteers) is an international non-profit organization specialized in the field of communications, in particular languages, communication technologies and conference support. Through volunteer effort, we cooperate with organizations in the humanitarian, social, environmental and medical fields to implement projects and conferences at local, national and international levels. We work with volunteers to implement social and educational programs in order to help populations and local communities to develop. In addition, ICVolunteers promotes volunteerism and its recognition, by enhancing civic commitment and involvement, and by providing leadership and links between organizations, individuals and communities.

ITU – International Telecommunication Union

www.itu.int

ITU is the United Nations specialized agency for information and communication technologies – ICTs. ITU allocates global radio spectrum and satellite orbits, develops the technical standards that ensure networks and technologies seamlessly interconnect, and strives to improve access to ICTs to underserved communities worldwide. ITU is committed to connecting all the world's people – wherever they live and whatever their means. They help manage and control emergency services, water supplies, power networks and food distribution chains. They support health care, education, government services, financial markets, transportation systems and environmental management. And they allow people to communicate with colleagues, friends and family anytime, and almost anywhere. The ITU's mission is to enable the growth and sustained development of telecommunications and information networks, and to facilitate universal access so that people everywhere can participate in, and benefit from, the emerging information society and global economy. The ITU assists in mobilizing the technical, financial, and human resources required to make this vision real.

OIF – International Organization of Francophonie

www.francophonie.org

The International Organization of La Francophonie (OIF) represents one of the biggest linguistic zones in the world. Its members share more than just a common language. They also share the humanist values promoted by the French language. The French language and its humanist values represent the two cornerstones on which the *Organisation Internationale de la Francophonie* is based. The *Organisation Internationale de la Francophonie* was created in 1970. Its mission is to embody the active solidarity between its 75 member states and governments (56 members and 19 observers), which together represent over one-third of the United Nations' member states and account for a population of over 890 million people, including 220 million French speakers. IOF organizes political activities and actions of multilateral cooperation that benefit French-speaking populations. Its actions respect cultural and linguistic diversity and serve to promote the French language, peace and sustainable development. The *Charte de la Francophonie* defines the role and missions of the organization. The current charter was adopted in Antananarivo, on November 23, 2005. The summit held in Ouagadougou, Burkina Faso on 26–27 November 2004 saw the adoption of a strategic framework for the period 2004-2014. The four missions drawn by the Summit of the Francophonie are: 1) Promoting French language and cultural and linguistic diversity; 2) Promoting peace, democracy and human rights; 3) Supporting education, training, higher education and scientific research; 4) Expand cooperation for sustainable development.

SCN – National Civic Service of Senegal

<http://196.1.94.30/portail/index.php/site/showAgence/id/3>

The National Civic Service of Senegal (SCN) aims to promote citizenship, learning and professional apprenticeship to volunteers for their socio-economic integration, to provide professional training in an area in need of national competence, to encourage engagement of youth in volunteering and in public interest activities and the major projects of the State. In this context, the CNS promotes the values of volunteerism and engagement, especially among youth. The CNS is active in the following areas: local development, urban management, public health and environment, literacy, youth work, community health, civil protection and agriculture.

SNN/CCC-TIC – Sustainable Neighbors Network/Capacity Building Center for ICTs

www.sipsenegal.org

The SNN/CCC-TIC, along with the GENSEN (Global Ecovillage Network Senegal) Sénégal and EREV (Earth Rights Eco-Village Institute) are NGOS whose mission is to eradicate hunger and poverty, to support local sustainable development, to preserve environment and traditions in Africa. They work in different fields of development and work with two community networks (60 villages and local governments). The 'EcoYoff Living & Learning Center' focuses on the network of Ecovillages in Senegal (GENSEN). Its mission is to build in Yoff, by the year 2020, a laboratory for sustainable development, eco-community and a new development approach involving Africa and the global community. It works in the field of education and formal and informal training, literacy, five dimensions of environmental technologies and community, preschool health, nutrition and sustainability of child education, and offers perspectives in sustainable international studies, internships and volunteer opportunities in the field of service learning, participatory and active research and design of development programs.

UNIGE – University of Geneva

www.unige.ch

The University of Geneva is a public research university located in Geneva, Switzerland. It was founded in 1559 by John Calvin, as a theological seminary and law school. It remained focused on theology until the 17th century, when it became a center for Enlightenment scholarship. In 1873, it dropped its religious affiliations and became officially secular. Today, the university is the second-largest university in Switzerland. It has programs in various fields but is particularly acknowledged for its academic and research programs in international relations (with Geneva being hostess to a dense agglomeration of international organizations), law, astrophysics, astronomy, genetics (with a record of prominent contributions to the fields of planetary science, genetics, developmental psychology, neuroscience, and theology). The university holds and actively pursues teaching, research, and community service as its primary objectives. In 2009, the University of Geneva celebrated the 450th anniversary of its founding. The university is a member of the League of European Research Universities. It was ranked 73rd worldwide by the Academic Ranking of World Universities, and 69th in the QS World University Rankings in 2011.

Université Cheick Anta Diop de Dakar

www.ucad.sn

Located in West Africa, the University Cheikh Anta Diop (UCAD), also known as the University of Dakar, is the main university in Dakar, Senegal's capital. It bears the name of the historian and anthropologist Cheikh Anta Diop. Created on 24 February 1957, the University of Dakar was officially opened December 9, 1959 after a long evolution. The University comprises the following faculties: Science and Technology (FST); Humanities (FLSH); Legal and Political Science (FSJP); Economics and Management (FASEG); Science and technology education and training (FASTEF); Medicine and Pharmacy (FMPOS).

Appendix 3: Text by Lucas Luisoni

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Quelle agriculture pour demain ?

"Consommation responsable, biodiversité et souveraineté alimentaire"

En préambule, j'aimerais dire que *consommer responsable*, c'est tout simplement consommer moins. C'est être plus frugal dans ses besoins et plus généreux dans le partage. C'est pas plus compliqué que ça !

Pour aborder ce sujet, j'aimerais faire honneur aux abeilles (sauvages et domestiques) aujourd'hui menacées par nos modes de productions agricoles. On assiste impuissant à l'effondrement de leur colonies, alors que près de 80% des plantes alimentaires ont besoin des insectes pollinisateurs.

Les abeilles sont menacées et on cite abondamment dans les médias et les milieux concernés comme leur ennemi n° 1, un acarien, le bien nommé *Varroa destructor*.

Pourquoi s'est-on focalisé sur ce prédateur ? **Hélas, principalement parce que l'industrie sait fabriquer des acaricides !**

Sauf que l'on sait aussi que nous nous trouvons face à un problème multifactoriel et des effets de synergie. C'est toujours le cas dans le domaine du vivant (que ce soit en écologie ou en médecine). C'est l'ensemble des coupables certains et probables de la mortalité des abeilles : des pesticides, des virus, d'autres maladies et parasites et certains frelons prédateurs qui crée cette situation. Si les abeilles peuvent résister à un pesticide séparément, l'effet cocktail de poisons multiples et mélangés est beaucoup plus nocif.

Dans le cas des abeilles on doit y ajouter, une baisse en qualité et en quantité des milieux agricoles et naturels en tant que ressources alimentaires. Les insectes pollinisateurs se retrouvent par moment avec moins de nourriture et surtout moins de variété dans leur nourriture.

Le manque de variété est plus dommageable que le manque de quantité ! Et c'est ce que l'on constate dans l'agriculture. La révolution verte développée chez nous avant d'être exportée dans les pays du sud, est basée sur une industrialisation de la production. D'abord grâce aux engrais chimiques (avec au premier plan les engrais azotés) et aux pesticides, puis par la sélection de variétés à haut rendement (capable d'exprimer leur haut potentiel dans des conditions de fertilisation élevée et grâce à la lutte chimique).

Cet objectif d'industrialisation est toujours par essence quantitatif et il vise la standardisation. On veut plus de rendement avec des tailles, des formes, des goûts, des degrés de maturité standards pour rationaliser le cycle production-transformation-distribution.

Cela me donne l'occasion d'aborder la question de l'azote : un cycle moins connu, mais probablement aussi important que le cycle du carbone que nous connaissons tous aujourd'hui par la problématique des gaz à effet de serre dont le CO² est le « chef de file ».

L'invention par Fritz Haber - prix Nobel de chimie en 1918 ! - de la fabrication de l'ammoniac NH₃ à partir de l'azote atmosphérique N₂ (qui compose 80% de l'air que nous respirons !) a permis la production massive d'engrais azotés. Pour la petite histoire, le procédé appelé Haber-Bosch est une application industrielle qui fut d'abord à l'origine des principaux explosifs produits à grande échelle pour les besoins de la première guerre mondiale, puis de bien des poisons comme le gaz moutarde, le Zyklon B et autres biocides descendant des organochlorés. Des armes chimiques, recyclées en pesticides pour l'agriculture : entre autres le DDT, la dioxine puis les organophosphorés comme le Glyphosate (aujourd'hui 95% des OGM cultivés dans le monde sont soit des « RoundUp ready » de Monsanto ; des variétés résistantes à cet herbicide, soit des semences « BT » pour *Bacillus Turiensis* une bactérie insecticide dont on a introduit le gène dans les plantes cultivées)

Le coût énergétique induit par la production de produits azotés est très élevé ! Il faut 3 tonnes d'équivalent pétrole pour produire une tonne d'ammoniac. Ceux-ci sont non seulement massivement utilisés en agriculture mais aussi dans de très nombreuses applications industrielles.

Auparavant, l'azote minéralisé nécessaire aux plantes provenait essentiellement, de la synthèse de l'azote de l'air par des rhizobactéries installées dans des nodules associés aux racines des légumineuses.

Aujourd'hui, on assiste à une eutrophisation des milieux. La perte de biodiversité induite par l'homme, conduit à la perte des abeilles et cette raréfaction des abeilles contribue logiquement à une diminution de la biodiversité. C'est un cercle vicieux dont nous sommes responsables.

On présente souvent l'enjeu majeur de la conservation de la biodiversité comme étant le besoin de préserver un patrimoine, des espèces (des gènes) qui risqueraient sinon de disparaître alors qu'ils pourraient nous être utiles voire nécessaires un jour. Cela nous amène à concevoir des banques de gènes et de semences, dans d'immenses « congélateurs coffre-forts ». Le projet de la banque de semence de Svalgard, sur l'île du Spitzberg en Norvège en est le symbole le plus marquant. On prévoit d'entreposer trois millions de variétés de semences dans cette « Arche de Noé glacière » pour conserver ces semences même en cas de panne d'électricité. Le ministre norvégien de l'Agriculture et de l'Alimentation a affirmé que la perte de la diversité génétique représente une perte d'héritage culturel et une diminution de notre habileté à faire face à de nouveaux défis, tels les changements climatiques ou la croissance de la population.

Cette intention certes louable, a à mon sens, le goût amer de l'anticipation d'une situation post-catastrophe. Une catastrophe évitable si l'on a la volonté d'agir pour vivre dans un environnement plus riche et plus varié donc plus stable et plus beau ! Cet enjeu essentiel nous invite à prôner localement des milieux agricoles et naturels riches en biodiversité.

Les écosystèmes sont des systèmes ! Pour fonctionner de manière durable, le bouclage des flux d'énergie et de matière de ces systèmes est fondamental.

Plus les flux s'autoalimentent en boucles fermées sur un espace restreint plus l'écosystème qu'ils constituent est robuste et stable, donc durable. Plus les écosystèmes sont ouverts (boucles rompues) plus les déséquilibres s'aggravent. Ces écosystèmes vivent alors aux dépens d'autres écosystèmes sans restituer ce qu'ils leur prennent.

La viande, que nous consommons en excès dans les pays développés du Nord, est un bon exemple. Celle-ci est essentiellement produite industriellement. Ce mode de production conduit non seulement à une perte de biodiversité, mais il induit aussi un transfert de la fertilité, du sud (amazonienne en particulier) vers le nord. La boucle est rompue. Nos animaux consomment du soja OGM, produit au Brésil sur des terres gagnées à la forêt amazonienne. Ces protéines du soja (l'azote !) se retrouvent dans les déjections des bovins et celles de leurs consommateurs. Elle n'est plus restituée à la terre Amazonienne.

La nécessité de ces boucles fermées est, pour la durabilité sociale, de même nature que les principes fondamentaux qui régissent la défense de la souveraineté alimentaire et l'agriculture de proximité.

C'est pour cela que j'invite les agronomes, les agriculteurs, les décideurs et les hommes et les femmes du monde entier à s'engager pleinement en faveur :

- *d'une agriculture vivrière biologique de qualité et de proximité qui produit des plantes saines, variées et goûteuses pour la santé des enfants, des femmes et des hommes ;*
- *d'une agriculture paysagère harmonieuse, pour le plaisir des yeux et du cœur qui produit des plantes ornementales belles et merveilleuses ;*
- *d'une agriculture au service de la protection de l'environnement qui produit des plantes « améliorantes », utiles et variées.*

Lucas Luisoni : Ingénieur agronome
Chargé de cours hepia, filière Agronomie horticole
Consultant : www.donnerdusens.ch

Appendix 4: Article about Guédé-Chantier



Genetic resource center in the north of Senegal

The Eco-community of Guédé Chantier is located in the semi arid Senegal river valley by the border of Mauritania. The first settlements started in the early thirties when French colonists forced neighbouring villagers and people from other colonies, mainly Mali and Mauritania, to clear the forest for rice agriculture.

As the French started this project, my grandmother, now 107, was in her late twenties. The whole area was verdant, with a diverse wild life. There were lions, elephants, crocodiles, thousands of colourful birds and many other animals.

Towards the end of the seventies, the Senegalese government continued the colonial project. They gave Guinean refugees licenses to clear the forest for the implementation of rice farms. The results of these disastrous policies are the disappearance of organic crops, more frequent storm sands, erosion, extreme temperatures, and the destruction of wild life as well the degradation of the local people's lifestyles and living standards: before the introduction of rice farms in the river valley, locals led healthier and more sustainable lives. They grew a number of crops, such as organic millet, the rivers were not polluted by chemical pesticides or fertilizers and people could drink fresh river water without very serious health risks. But today local farmers are sadly trapped between heavy bank loans, poor crop yields and unhealthy diets.

Now most of the land in the north of Senegal is like a gigantic soccer field: almost no trees or animals. To reverse this tendency, a number of strategies are currently being carried out. Among these strategies was the creation of a genetic resource center in Guédé Chantier eco-community in 2002. It is run by a group of farmers under the leadership of agriculture technician, Amadou Bra Sy.

In this center, endangered medicinal plants and tree species are grown to provide seeds for the seed bank and are distributed free of charge to local networks of farmers' associations.

The center is also a school where farmers come to learn techniques of composting and fighting pests without chemicals. Despite the challenges the center is now facing, its action has been beneficial to the local and surrounding communities: green areas are now coming into existence, some farmers are making their way back into business and the local population is more aware of the necessity to preserve the environment to secure medicinal plants and food for themselves and for their livestock. Hopefully with Fatou Seck's book on the area's traditional recipes and workshops, the younger generations will rediscover a rich culinary heritage.



Amadou Bra Sy, founder of the Genetic resource center

Appendix 5: Presentation by Moustapha Ndiaye



USA
1755 Howard Avenue
Suite C105
Irvine, CA 92614
Fax 949-361-7094

ONG pour le
Développement
Durable

Senegal
BP 8870, Dakar
Tel 221-33-820
-8200
221-77-023-8888




Le Système d'Information des Collectivités Locales (SIPEEY)

<http://www.sipsenegal.org>



The screenshot shows the SIPEEY website interface. At the top, there's a navigation bar with links: Accueil, Présentation du SIPEEY, Objectifs d'un SIPEEY, Réalisations, Projets, Partenaires, and Contacts. Below this, the main content area is titled 'Système d'Information des Collectivités Locales' and 'Présentation'. It features a large image of a building and text describing the system's history and mission. On the left, there's a sidebar with a list of regions in Senegal. On the right, there's a section for 'PROJETS RECHERCHANT DES PARTENAIRES' and 'ACTUALITES'.

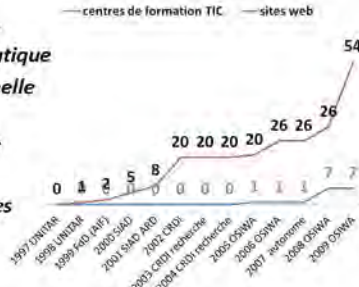



The screenshot shows the website for the Malicounda Rural Community. It has a yellow and white color scheme. On the left, there's a sidebar with a list of categories: Accueil, Historique, Géographie, Education, Santé, Economie, Environnement, Cultures et Religions, Sports et Loisirs, Vies Associatives, Réalisations et Projets, Infrastructures, and Cadres de Vies. The main content area is titled 'Communauté Rurale de Malicounda' and 'Bienvenue'. It features a large image of a building and text describing the community. On the right, there's a section for 'Rechercher' (Search) and 'La Médiathèque' (Media Library).

Evolution du Système d'information des Collectivités Locales (SIPeey¹) depuis 1997

- Les origines
- Les composantes
 - Sites web, centres de formation en informatique
- La recherche opérationnelle
- La participation des CL, avec l'appui de l'AMS et l'ANCR
- La couverture de 10% des collectivités locales avec des sites web

Figure 1. Evolution des sites web SIPeey et des centres de formation TIC en cascade



« Peey » signifie collectivité local en Wolof

Cérémonie de Distribution des Diplômes



Objectifs, Activités et Résultats

Tableau 1 : Objectifs, Activités	Résultats
1. Créer, en partenariat avec 6 CL, 6 nouveaux centres de formation en TIC, chaque centre avec 20 ordinateurs	6 centres réalisés
2. Former, en utilisant le système cascade à moindre coût, un grand nombre de formateurs et d'apprenants en bureautique, maintenance, web design, infographie et logiciels libres	+ 1 000 formés y inclus : 40 formateurs 80 maintenanciers 120 webmasters
3. Mettre à jour ou créer les nouveaux sites web de 32 CL	54 sites réalisés

Objectifs, Activités et Résultats

Tableau 1 : Objectifs, Activités et	Résultats
4. Créer de l'emploi continu avec les nouveaux formateurs des centres de formation pérennes dans lesdites collectivités	Objectif réussi de façon partielle
5. Vendre à moitié prix, 20 ordinateurs à chaque CL - avec un système de location vente - qui applique les frais de scolarité des apprenants à la couverture des coûts des machines	80% des coûts recouverts, jusqu'à présent

MERCI DE VOTRE ATTENTION

Présenté par Monsieur Moustapha Sarr NDIAYE,

Ingénieur en Informatique et Directeur du Centre de formation CCC-TIC (Centre de Création de Capacités en Technologies de l'Information et de la Communication) et du SIPeey (Système d'Information Populaire pour les Collectivités Locales du Sénégal)

Avez-vous des questions ou commentaires à propos du CCC-TIC ou bien du SIPeey ?

Objectifs, Activités et Résultats

Tableau 1 : Objectifs, Activités et	Résultats
6. Former les formateurs en logiciels libres afin de permettre aux centres d'éviter des problèmes de virus et d'illégalité	60 formateurs formés
7. Affilier le programme avec l'état et les écoles professionnelles	Conventions avec AMS, ANCR
8. Rédiger et déposer un guide et d'autres documents	Documents déposés



E-TIC, Vitrines du Sahel

E-TIC.net

Séminaire de formation sur
l'utilisation des TIC, par 22 jeunes
volontaires pour l'agriculture du
Service Civique National au Sénégal,

1 au 3 avril 2010



Un lien entre les connaissances et les besoins

LES FORMATEURS

- Jim Rudolf (ICV)
- Moustapha Sarr Ndiaye (ICV / CCC-TIC / SNN)



C'EST QUOI LES TIC ?

Les Technologies de l'Information et de la Communication

- téléphone portable
- Internet
- radio

La question qui nous intéresse : Comment utiliser le TIC pour le développement ?



PLAN DE FORMATION

1^{er} jour

- Présentation du projet
- Internet : introduction à http et aux courriels
- Navigateur, une adresse url

2^e jour

- Reprise des notions apprises la veille
- Questionnaire : techniques d'enquête
- Collecte de données : situation de la localité où se trouve le volontaire

3^e jour

- www.e-tic.net : présentation du portail
- Ses contenus
- Autres questions...



LE PROJET E-TIC

L'objectif :

Aider les petits agriculteurs, éleveurs et pêcheurs à mieux vendre leurs produits

Quelques défis :

- un manque d'information du marché : prix, disponibilité
- un manque d'information des bonnes pratiques
- un bon partie du groupe cible est analphabète

Le projet E-TIC vise à :

- utiliser le TIC pour améliorer l'accès à l'information
- former les *relais de terrain* pour aider ce processus



LES RELAS DE TERRAIN

Qui sont les *relais de terrain* ?

- jeunes
- femmes
- journalistes (écrit et radio)

Qu'est-ce qu'ils font ?

- alimenter le site web avec les prix de marché
- publier articles, insérer des vidéos, etc... sur le sujet de la agriculture
- faire une connexion importante entre le TIC et les utilisateurs
- former d'autres relais de terrain pour un effet multiplicateur



COMMENT FONCTIONNE LE SYSTEME ?

La circulation de l'information du marché

- relais de terrain envoient des SMS avec les prix des produits
- le site Web gère tous les prix et marchés
- les prix sont disponibles sur le Web
- ils sont aussi annoncés régulièrement à la radio

La disponibilité de documents, articles, etc... :

- relais de terrain recherchent, écrivent (ou enregistrent) le contenu
- ils téléchargent le contenu vers le site Web
- le nouveau contenu est publié par le modérateur du site



RESULTATS SOUHAITES

- Adapter les TIC aux besoins des éleveurs, agriculteurs et pêcheurs
- Créer des opportunités pour les jeunes en zones rurales
- Réduire le fossé numérique pour une société des savoirs partagés



ZONES PILOTES

Zones pilotes au Sénégal

- Guédé-Chantier
- Mbam
- Mékhé

Zones pilotes au Mali

- Tombouctou
- Ségou
- Sikasso



LE ROLE DU VOLONTAIRE

En général :

- Il y a beaucoup de projets importants sans financement !
- Le volontaire apporte énergie, enthousiasme et des nouvelles idées
- Il a parfois des connaissances clés pour un projet

Pour le projet E-TIC :

- Nous voulons plus de données provenant des régions
- Questionnaire
- Enquête



STRUCTURES



USA

17595 Harvard Avenue
Suite C106
Irvine, CA 92614
Fax 949-861-7094

ONG
pour le
Développement
Durable

Sénégal

BP 8873, Dakar,
Tel: 221 - 33 - 820
- 9200
221-77-023-8888



Centre de Création de Capacité en TIC




Appendix 6: Presentation by Swithin Mutaasa

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

01

ICT IN BWINDI IMPENETRABLE NATIONAL PARK

How ICT is used to transform lives of rural, impoverished communities living in and around the National Park in the remote region of South Western Uganda




02

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

Conservation Through Public Health (CTPH) PROGRAMMES

WHAT THEY DO:


Gorilla conservation by enabling humans, wildlife and livestock to coexist through improving primary healthcare in and around Africa's protected areas



Wildlife Health Monitoring (WHM)
WHM systems for disease outbreaks through wildlife faecal sample collection and analysis. Training of Rangers and Research Assistants in Wildlife health Monitoring through recognizing clinical signs. Disease surveillance to detect infection rates and trends of diseases that spread between wildlife, livestock and humans

Information, Education & Communication (IEC)
The internet provided by the CTPH Telecentre makes the world smaller, enabling local people to learn from the international community and address the problems of isolation, poor health practices, and increase access to education and jobs to name a few

Human Public Health (HPH)
A Population, Health and Environment (PHE) approach is being used to reduce threats to mountain gorillas and other wildlife, by consolidating community based health care to promote family planning, and prevent and control TB, scabies, HIV/AIDS and dysentery.



START CyberVolunteers ABOUT CTPH THE TELECENTRE THE CYBERVOLUNTEER TELECENTRE OBSERVATIONS TELECENTRE CHALLENGES COMMUNITY OBSERVATIONS ADAPTING E-TIC OTHER INFO

03

The Bwindi Community Telecentre

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

Access to Information & Internet
THAT'S WHAT WE THINK!

ICT Skills Training

Manage Community Sites

Stimulate alternative Income
generation activities



START
CyberVolunteers

ABOUT
CTPH

THE TELECENTRE

THE CYBERVOLUNTEER

TELECENTRE
OBSERVATIONS

TELECENTRE
CHALLENGES

COMMUNITY
OBSERVATIONS

ADAPTING
E-TIC

OTHER INFO



04

Role of the CyberVolunteer

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS



WEB DESIGN & E-NEWSLETTER

USING WEB 2.0 TOOLS

CTPH Website Facelift and integration with social media tools. Design & development of Community websites. E-newsletter design & integration



MEMBERS' DATABASE

ECO-TOURISTS; SUPPORTING CONTACTS

CTPH Database intended to track and maintain a relationship with Eco-Tourists; Visitors to the Bwindi Impenetrable National Park; Well-wishers and Conservationists



ICT SKILLS TRAINING

CTPH FIELD STAFF & LOCAL COMMUNITY

Imparted ICT Skills to CTPH Telecentre and field staff. Participated in training members of the local community in computer literacy

START
CyberVolunteers

ABOUT
CTPH

THE TELECENTRE

THE CYBERVOLUNTEER

TELECENTRE
OBSERVATIONS

TELECENTRE
CHALLENGES

COMMUNITY
OBSERVATIONS

ADAPTING
E-TIC

OTHER INFO



05

OBSERVATIONS

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

THE TELECENTRE EFFECT



1. **INFORMATION ACCESS POINT**
Education opportunities. Online networking. Wildlife. Animal Husbandry. Best Crop management practices. Market information for agricultural produce. Good health practices
2. **CATALYST FOR POSITIVE CHANGE**
Alternative livelihood activities to poaching, deforestation and whole day drinking
3. **LOCAL COMMUNITY PARTICIPATION**
Positive participation in CTPH programs. Appreciation of CTPH's work

START CyberVolunteers ABOUT CTPH THE TELECENTRE THE CYBERVOLUNTEER TELECENTRE OBSERVATIONS TELECENTRE CHALLENGES COMMUNITY OBSERVATIONS ADAPTING E-TIC OTHER INFOS 

06

Challenges: Community Telecentre

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

1. **HIGH CONNECTIVITY COSTS**
High Fees for Internet. Unreliable Internet connection
2. **HIGH COST OF COMPUTING EQUIPMENT**
Choice of Laptops over Desktops.
3. **HIGH COSTS OF POWER**
No connection to National Grid. Telecentre entirely run on Solar Panels and a Generator

START CyberVolunteers ABOUT CTPH THE TELECENTRE THE CYBERVOLUNTEER TELECENTRE OBSERVATIONS TELECENTRE CHALLENGES COMMUNITY OBSERVATIONS ADAPTING E-TIC OTHER INFOS 

07

Observations specific to the local community

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

1. | LOW LITERACY LEVELS
2. | «THIRST» FOR INFORMATION
3. | PLATFORM FOR EXPRESSION
4. | MOBILE TELEPHONY
5. | INFORMAL NETWORKS

START CyberVolunteers ABOUT CTFH THE TELECENTRE THE CYBERVOLUNTEER TELECENTRE OBSERVATIONS TELECENTRE CHALLENGES COMMUNITY OBSERVATIONS ADAPTING E-TIC OTHER INFOS 

08

Adapting E-TIC & Agriguide

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS

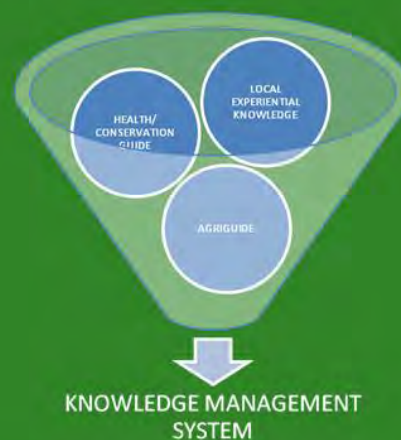
THE TELECENTRE AS A CHANNEL(FUNNEL)

The Telecentre is rejuvenated as a self- sustaining model offering auxiliary commercial services together with the free core service – Access to Information & Internet

Provides a platform for the management of the online adapted guides and the community websites.

Stimulates Knowledge Sharing both Formal and Informal.

Lays the foundations for a Localized Knowledge Management System



START CyberVolunteers ABOUT CTFH THE TELECENTRE THE CYBERVOLUNTEER TELECENTRE OBSERVATIONS TELECENTRE CHALLENGES COMMUNITY OBSERVATIONS ADAPTING E-TIC OTHER INFOS 

09

MORE INFORMATION & RESOURCES

CyberVolunteers
A PROGRAM OF ICVOLUNTEERS



ICV News Archives

CyberVolunteers

<http://www.icvolunteers.org/index.php?what=news&id=191>



CONSERVATION THROUGH PUBLIC HEALTH

CTPH

www.ctph.org



A DOWNLOAD THIS PRESENTATION

Cyber Volunteer Experience in Uganda

www.serwadda.com/ICTBwindi.pptx

START
CyberVolunteers

ABOUT
CTPH

THE TELECENTRE

THE CYBERVOLUNTEER

TELECENTRE
OBSERVATIONS

TELECENTRE
CHALLENGES

COMMUNITY
OBSERVATIONS

ADAPTING
E-TIC

OTHER INFO



Appendix 7: Presentation by Céline Casteline et Filmon Abraha

Ethical Fashion Programme in Ghana



TIC pour l'Afrique
21.09.12



Plan de la présentation

- Introduction
 - Situation de l'industrie textile au Ghana
 - Marché international du textile
- Projet *Ethical Fashion* au Ghana
 - Acteurs
 - Objectif
- Problématique
- Objectif de notre recherche
- Méthodologie
- Conclusion

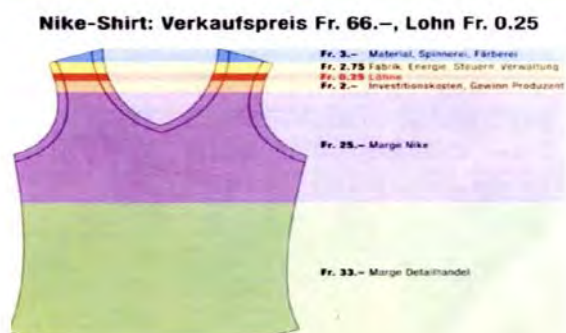
Introduction: Situation du textile au Ghana

- 60's-70's: Politique d'industrialisation par substitution aux importations
- Les secteur textile domine l'industrie manufacturière et emploie environ 25'000 personnes
- 80's-90's: Nouvelle politique néolibérale, libéralisation du commerce
- Afflux massif de produits étrangers, chute du nombre d'entreprises et donc du nombre d'emplois

Introduction: Situation du textile au Ghana

- Produits ghanéens non compétitifs par rapport aux produits asiatiques
- Impossible de rivaliser avec les immenses usines chinoises
- La Chine possède un avantage compétitif majeur: combine bas salaires, forte productivité, production de haute qualité et intrants à faibles coûts

Introduction: Le marché international du textile



Projet *Ethical Fashion* au Ghana: Les partenaires

- Le Secrétariat d'Etat à l'économie (SECO)
- Centre du Commerce International
- ICVolontaires
- Ministère ghanéen du Commerce et de l'Industrie
- Manor SA

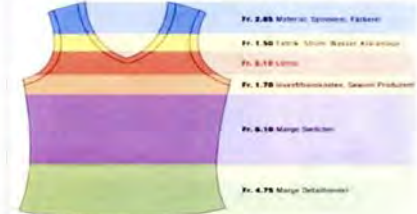
Projet Ethical Fashion au Ghana: Objectif



Projet Ethical Fashion au Ghana: Objectif

(Verkaufspreis = prix de vente, Lohn = Salaire ; salaire en rouge dans la répo

Switcher-Shirt: Verkaufspreis Fr. 19.-, Lohn Fr. 2.10



Problématique

Existe-t-il une place pour une filière textile africaine éthique dans un marché où règne la concurrence et où la production est très peu valorisée?



Objectif de notre recherche

- Comprendre les attentes des consommateurs
- Déterminer la meilleure stratégie pour commercialiser les produits ghanéens en Suisse selon les attentes d'ITC

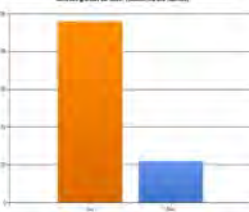


Méthodologie

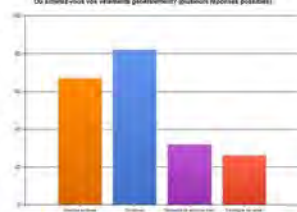
Questionnaire

Pensez-vous que vous achèteriez plus facilement des vêtements éthiques s'ils étaient vendus dans des grandes surfaces?

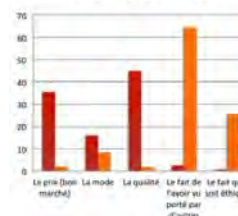
(Pensez-vous que vous achèteriez plus facilement des vêtements éthiques s'ils étaient vendus dans des grandes surfaces? (répondre par oui/non)



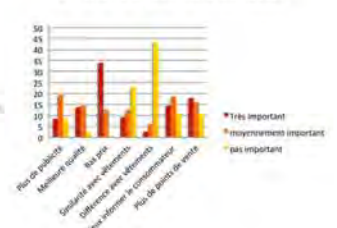
Où achetez-vous vos vêtements généralement? (plusieurs réponses possibles)



Pour vous, qu'est-ce qui détermine l'achat d'un vêtement?



Que faudrait-il pour que vous achetiez des vêtements éthiques?



Méthodologie

- Interviews
 - Consommateurs
 - Distributeurs: Responsable de ventes Esprit, Switcher, diverses boutiques
 - Petits magasins spécialisés dans les vêtements éthiques
 - Forum Ethical Fashion Night

Conclusion

- But: apporter un éclairage du marché international de la mode et des attentes des consommateurs
- Confronter avec les réalités et attentes du terrain



Appendix 8: Presentation by Michael Riggs



THE E-AGRICULTURE COMMUNITY

Michael Riggs

Knowledge and Information Management Officer

Food and Agriculture Organization of the United Nations (FAO)

michael.riggs@fao.org @mongkolroek



About e-Agriculture



A global Community of Practice.

People from all over the world exchange information, ideas, and resources related to the use of information and communication technologies (ICT) for sustainable agriculture and rural development



Founding Partners (2006)



Members – Individuals



- Information and communication specialists
- Researchers
- Farmers
- NGO staff
- Students
- Policy makers
- Business people
- Development practitioners and others



Discuss Key Issues



In 3 years, more than 25,000 people have participated in and visited e-Agriculture's online discussions.

Results:

- Policy briefs on key topics
- Foster new partnerships
- Identify challenges and propose solutions
- Share good practices
- Develop policy/practice frameworks and models



Focus on Key Topics



Mobile phones in rural areas

The potential of mobile technology to benefit rural communities and improve food security is certain.

In 2000, 25% of all mobile phones were in developing countries.

Today 75% of all mobile phones are in developing countries.



Mobile Information Services



MOBILE INFORMATION SERVICES: The Benefits of Forming Strong Partnerships to Create Sustainable and Scalable Information Advisory Services

Online Discussion Forum 21 November - 2 December 2011

www.e-agriculture.org/forums/forum-archive

- The e-Agriculture Community and the mFarmer Initiative forum discuss types of partnerships that are conducive to creating sustainable and scalable mobile information and advisory services for farmers.
- mFarmer: partnership between GSMA, USAID and the Bill and Melinda Gates Foundation set up to support mobile operators and agricultural partners in launching mobile information services that benefit farmers and are commercially viable.

Mobile Information Services



mAgri = mobile agricultural information service

- What value does mobile network operator (MNO) and agricultural partner bring to mAgri?
 - ▣ Understand strengths and leverage
 - ▣ Roles clearly defined
- 2 models for mAgri, but which is better?
 - ▣ MNO integrates mAgri in their own service portfolio
 - ▣ MNO only provides infrastructure and revenue sharing as a business contract

Mobile Information Services



- Agricultural partner
 - ▣ Ability to identify target farmers and their information needs
 - ▣ Reputation that farmers value, adding to value of information service
 - ▣ Understanding format(s) best suited for collection and delivery of information (voice/IVR, text, etc.)
 - ▣ Collect, analyse, refine and make available relevant agricultural information
 - ▣ Market information services in the field
 - ▣ Convince MNO that mAgri can be real business

Mobile Information Services



- MNO
 - ▣ Provide telecom network (including reach into underserved regions/areas)
 - ▣ Marketing and communication along with other services available through network
 - ▣ Bundle with complimentary services, e.g. mobile money
 - ▣ Generating, collecting and sharing revenue with agricultural partner
 - ▣ Opportunity for USSD (Unstructured Supplementary Service Data) in addition to SMS

Mobile Information Services



- Need for a third party in mAgri
 - ▣ Formatting of content
 - ▣ Quality assurance of content
 - ▣ Provide a technology platform to create a format the MNO can use from the agricultural partner's content
- Partnerships with more than one MNO?
 - ▣ Difficult until value of mAgri better understood
 - ▣ May provide best value to consumer (i.e. farmers)
 - ▣ Requires skill in agricultural partner to support MNOs' need for differentiation

Mobile Information Services



- Challenges in the partnership relationship
 - ▣ Size of MNO vs. agricultural partner
 - unbalanced bargaining power/relationship
 - ▣ MNO may be unwilling to work directly with agricultural partner
 - ▣ MNO needs large scale quickly
 - ▣ Agricultural partner focus on “needs assessment” vs. MNO focus on “demand analysis”

Mobile Information Services



- Challenges overall
 - ▣ Very few profitable models known to date
 - so how can mAgri be sustainable?
 - ▣ Need to blend mobile services with other information services (e.g. face-to-face training)
 - What formats and what ratio?
 - Will other partners be needed?
 - ▣ Disagreement about MNO's role
 - ▣ Literacy, language, and interface
 - Especially with SMS or text-based services
 - No agreement on magnitude of this issue



Mobile Information Services



Consider the “market” for mAgri

- There are 6 billion phone subscriptions, but only a fraction belong to farmers who have interest, capacity, and can afford mAgri
- Individual prioritization of expenditure often does not rank agricultural information (the livelihood) as highest priority



Mobile Information Services



Direct to farmer vs. intermediary services

- Ideal mAgri service is direct to farmer, but requires all have mobiles AND capacity to act on available information
- Role of intermediaries (e.g. Grameen Foundation's CKW) exists
- Intermediaries (e.g. cooperatives) or subsidies (e.g. government support) can also make information services available to poorest, though probably not on an individual basis

Mobile Information Services



- Barrier to reaching scale is conflict of:
 - ▣ Farmers' cost sensitivity
 - ▣ MNO's need for volume
 - ▣ Cost of providing quality, localized information
- IKSL has achieved scale
 - ▣ Partnership of Bharti Airtel and IFFCO
 - ▣ IFFCO widely known and trusted by farmers
 - ▣ IFFCO very large with significant farm-level linkages
 - ▣ Can two partners like this be found elsewhere?

Mobile Information Services



Opportunities and future trends (cont.):

- Awareness and capacity development at individual level are critical
- Mobilization of local content based on farmers' innovation and knowledge
- Content resource/database grows ("learns") from farmers' information requests such as help lines



Mobile Information Services



Opportunities and future trends:

- SMS fades as data costs fall (allowing voice and rich data to expand)
 - ▣ A question of "when?", not "if"
- Roles of information producers and owners clarified (hopefully)
 - ▣ May separate MNO from VAS provider (as history shows in developed countries)
- Research into low cost and low energy solutions for both handsets and networks



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