

FACIL-ICT Ghana

Facilitating the Interaction between Citizens and Local Governments through Information Communication Technology (FACIL-ICT)

A Pilot project in the Nsawam-Adoagyiri and Suhum Municipalities in Ghana

July 2021 – June 2023

Introduction

This paper presents results from the research and development project “Facilitating the Interaction between Citizens and Local Governments through Information Communication Technology” (FACIL-ICT Ghana). Prototyping of ICT-based solutions for communication between citizens and local government functionaries formed the final phase of the pilot project which started in June 2021. The project is implemented by the Centre for Planning and Development of Social Services (ZPE), University of Siegen (Germany) in cooperation with the Nsawam-Adoagyiri and Suhum municipal assemblies in the Eastern Region of Ghana. It is funded by Engagement Global-NRW on behalf of German Federal Ministry for Economic Cooperation and Development (BMZ).

The project aims at opening new possibilities for improving communication between community members and local governance structures through Information Communication Technology (ICT). To develop concrete solutions a co-creation workshop (10/2022) was organized in Nsawam. The participants were local government functionaries made up of the Municipal Coordinating Director (MCD), social welfare and community development coordinator, Assembly/unit committee members, disability desk officer, and officials in charge of planning, ICT, health, and Livelihood Empowerment Against Poverty (LEAP). This was followed by a design workshop at the University of Siegen (12/2022) with Ghanaian and German experts.

On that background, this paper outlines the following five proposals to be further elaborated at a meeting with municipal decision-makers and stakeholders from Nsawam-Adoagyiri and Suhum on 10 February 2023:

- i. Teenage pregnancy – Information campaign and digitalized information story
- ii. Digitalized welfare and health guide
- iii. ICT-based registration system for persons living with disabilities
- iv. CHPS-compounds with telemedicine unit and attached social welfare contact point
- v. Review of citizen-communication systems in both districts.

At this meeting, it is to be decided whether the proposed solutions are

- regarded as relevant and appropriate, and
- are to be fully developed in the coming months.

The full development of the proposals needs the cooperation of the University of Siegen and the municipal assemblies in terms of staff time, information, and costs. With regards to costs the budget possibilities of the FACIL-ICT project can be used but, in some respect, might have to be added by contributions from the Ghanaian districts.



1. TEENAGE PREGNANCY - INFORMATION CAMPAIGN AND DIGITALIZED TOOL OF AN 'INFORMATION STORY' ("Amanda's story" - in a gaming format with links to sources for information related to pregnancy and life problems of youth in Nsawam-Adoagyiri and Suhum)

1.1 Background

As a result of the FACIL-ICT workshop in Nsawam in Sept 2022, health care was selected as one of four areas to be further considered for the development of digitized tools. Following a recommendation from the Nsawam community health team, a focus was laid on preventing unwanted teenage pregnancy as part of the work of the community health care units responsible for sexual and reproductive health services. The suggestion was made on the following background: Like in other regions, teenage pregnancy in Nsawam-Adoagyiri is very high in numbers and of increasing social concern. District data for 2022 according to Health Office shows the following situation:

- New teenage pregnancies 527 out of 6752 (7.8%)
- New teenage deliveries 938 out of 6661 (14.1%)
- Teenage abortions 90 out of 454 (19.8%)

In a national comparison, in Eastern Region, teenage pregnancy is second high in all Ghanaian regions.

Teenage is often related to negative effects on female youngsters because early parenthood can be a high risk for the individual life perspectives of adolescents. A local prevention concept must include causes of teenage pregnancy, be supportive and partisan with the young women concerned, demand responsibility of men, and be sensitive to the social ambivalence of individual situations. It is suggested;

- a) to develop the digitalized tool of an '**information story**' ("**Amanda's s story**") in a gaming format with links to sources for information related to pregnancy and life problems of youth in Nsawam or Suhum. The tool could see teenagers of both sexes as a target group and could be offered in various contexts. A first draft has been already developed.
- b) Furthermore, it is suggested to integrate "Amanda's story" into a more **comprehensive district information strategy** (with guiding principles and a local action plan) to prevent unwanted pregnancies and parenthood among teenagers and young adults. This strategy should aim both at increasing teenagers' knowledge of sexual body functions and contraception methods and at empowering female youngsters to develop self-esteem and sovereignty over their bodies. Moreover, it is recommended to build such a strategy on a coalition between the district authorities and the CSOs already operating in the local field such as 'Marie-Stopes-Eastern Ghana' or UNICEF. This would allow making good use of their expertise.

1.2 Amanda's story

"Amanda's story" is to be a gamified information video that follows "Amanda", a virtual female youngster of 15 years, on her various steps from having sex with a former neighbor, to being afraid of being pregnant, on to being pregnant, to communicating within the family to deciding on how to go on, while involving the potential father. Key idea is to provide reliable information on every step of the script. This information involves medical and social content mostly taken from the well-respected Marie Stopes Ghana - website (<https://www.mariestopes.org.gh>). It also

comprehends addresses of municipal services and counseling agencies of CSOs in Nsawam and Suhum and other local contact points that might be helpful. The video will try to include information on current preventive measures and practices available in the districts, like sex education to parents and their wards through, Radio and Television health talks, ward education and ANC/PNC visits sharing of maternal and child health records booklets to pregnant mothers, formation of Adolescent Health Corners in the various health facilities in the districts, School Health Services, and the provision or offering of modern family planning commodities. This paper adds a draft version of the script in the annex.

1.3 Normative assumptions behind Amanda's story

The script for "Amanda's story" is based on the following assumptions regarding causes, effects, and options in situations of teenage pregnancy. Causes for teenage pregnancy can be different and multifactorial, such as

- No access, non-use, or inappropriate use of contraceptives,
- lack of education on sexual body functions
- lack of information on contraceptives,
- poverty and low self-esteem
- certain cultural practices in the society (early marriage),
- lack of parent-child communication,
- influence of drug use.

Effects of teenage pregnancy on mothers and their babies can be problematic:

- Need for information and support in difficult life situations,
- feelings of despair and depression leading to suicide,
- stigmatization,
- low educational attainment and delayed graduation,
- early parenthood,
- life-long lowered income and dependency,
- high neonatal mortality, low birth weight, preterm babies, several medical issues

Effects of teenage pregnancy are not restricted to female youngsters but involve men and families

- Need for information and support,
- need to take responsibility,
- need to support the pregnant teenager,
- need to develop appropriate solutions.

1.4 The final decision for motherhood /child delivery or abortion

It is assumed that pregnant teenagers should be supported in coping with their difficult life situation both in social and medical respect. The decision on whether to get the child or go for an abortion should be in the hands of the young woman. Decision-making should be supported by trustful people in her environment. Whatever option she decides on should be accepted and supported with the best available treatment.



2. A “DIGITALIZED WELFARE AND HEALTH GUIDE”

Manual with addresses and short descriptions of municipal services and counseling agencies of CSOs and other local contact points in Nsawam-Adoagyiri and Suhum relevant to welfare, youth, and health issues

2.1 Background

As a result of the FACIL-ICT workshop in Nsawam in Sept 2022, welfare, youth, and health issues were selected as three of four areas to be further considered for the development of digitized tools. When working on prototypes for adequate solutions it became obvious that a comprehensive composition of addresses of municipal services, counseling agencies of CSOs in Nsawam and Suhum, and other relevant local contact points for local people in need of support might be helpful.

Therefore, it is suggested to develop a digitized “guide” for both districts and to make it available for advice seekers with online and offline options.

2.2 Structure, method, and expected results.

The digitized guide consists of a database that could be structured in three parts: a) welfare, b) youth, and c) health with a substructure that fits the respective field. The database could be developed in a small project together with the district assembly administrators and the CSOs.

Each service should give the following information:

- Field
- Name
- Address
- Website
- Short description of an activity

The database could have the form of an excel-sheet and be layout in Siegen. It could be made accessible for advice seekers with online and offline options and could be applied for different purposes. The production could be done by the municipal assemblies or be sublet.

2.3 Work process for the realization

- Mapping / Staff cost up to ten working days – 300Ghc person day/ per district
- Production of brochure – University of Siegen



3. ICT-BASED REGISTRATION SYSTEM FOR Persons living with disabilities (PLWDS)

3.1 Background

The co-creation workshop in Nsawam with local stakeholders from academia, local government, and civil society identified needs and opportunities for ICT to support communications between local government and citizens. Municipal services for people with disabilities and related communication practices and challenges were identified as one of four core subjects to be elaborate on in prototyping processes. A key challenge was seen in the current practice of registration of persons with disabilities by the Social Welfare Department, which forms the basis for all related services. Up to now, registration has been done manually in a paper folder the so-called “album”. This complicates both systematic registration and all subsequent processes in the context of service provision for persons with disabilities. At the same time, it became evident from the research conducted in the FACIL-ICT project that all local government employees interviewed had access to smartphones, the use of which was already part of their daily working practices. People with disabilities, on the other hand, had below-average access to mobile phones in general and smartphones. Against this background, applications can be internet-based if they are accessed by government workers exclusively but must be accessible online and offline if they address the citizenry.

3.2 What to be developed

→ An ICT-based system for the Suhum Department of Social Welfare to register beneficiaries with disabilities:

STEP 1: Internal data management system to store and manage personal data of people with disabilities registered with the local government.

STEP 2: ICT-based registration service for citizens with disabilities

[STEP 3: Multifunctional ICT-based service desk with automatized functions]

- The proposal can be extended to Nsawam-Adoagyiri in case of interest.

3.3 Specifications

- A digital database to which the Disability Officer can add personal profiles of people with disabilities registered with the Social Welfare Department
- A simple user interface the Disability Officer enters via an application on her/his smartphone, tablet, or computer.
- The opportunity to save photos as files or directly from the camera.
- The possibility to store personal data securely, including name, date/place of birth, address, contact, disability status, health insurance status, beneficiary status, etc.
- The possibility to read out personal data according to certain categories.
- The possibility to send push messages to individuals and groups of registered persons.
- The possibility to send automated push messages or reminders (e.g., renewal of health insurance card, information on disbursement of items)
- The possibility for online and offline citizens with disabilities to send requests for registration or other things into the system.

The possibility for the disability officer to process external requests in the system.

4. DIGITAL UPGRADING OF TWO SELECTED CHP COMPOUNDS BOTH IN NSAWAM-ADOAGYIRI AND SUHUM /TELEMEDICINE UNIT WITH ATTACHED SOCIAL WELFARE CONTACT POINT

4.1. Background:

a) Due to distance and other accessibility issues related to problems of transport, personal mobility, costs, language, time and anxieties of different kinds of many people in the villages find it difficult to get good medical advice, diagnosis, and treatment. This is so, especially for situations where the special competencies needed go beyond what can be offered in a CHPS compound, i.e. The competence of a medical doctor is needed. In many cases, this is not easy to decide at first glance. Experiences with telemedicine show that virtual contact between an advice-seeking person and a doctor can support or replace a face-to-face diagnosis and sometimes even can enter into treatment, e.g. by suggesting a concrete therapy in form of a drug or other forms. The CHPS compound is the service element of the health care system closest to people. There is the assumption that it was good if CHPS compounds had a 'telemedicine unit' on their premises in addition to their face-to-face services. But this is not the case, and if so

- how exactly would such a 'telemedicine unit' look like
- how would it function concretely (e.g., visiting time 2 hrs. per week?)
- What would be the technical and personnel requirements?
- Who could provide it with a doctor – the health services?
- Who could use it under what conditions?

b) Due to distance and other accessibility issues related to problems of transport, personal mobility, costs, language, time and anxieties of different kinds of many people in the villages find it difficult to get good information and advice in matters related to social welfare services, like disability issues, youth welfare, drugs, violence, etc. Mostly the district welfare officers – however, try to contact people also in their homes - are only available on the premises of the district assembly in the district capital. In many situations, direct contact on a virtual basis could help to solve certain problems or to disseminate helpful information to advise-seekers from the villages. As there are often no own digital devices available the suggestion is that people can go to a virtual 'social welfare contact point' that is offered in the local CHPS compound jointly using the facilities of the 'telemedicine unit' if established. Still, questions arise like;

- how exactly would that look like,
- how would it function concretely (e.g., visiting time 2 hrs. per week?)
- What would be the technical and personnel requirements?
- Who could provide it with a social worker – the Welfare services?
- Who could use it under what conditions?

4.2. Solution in close cooperation with Health Care Services and the Social Welfare Services

a) It is suggested to identify two CHPS compounds both in Nsawam-Adoagyiri and Suhum that are interested in functioning as models for testing an integrated CHPS compound. This is to be done in close cooperation with the Health Care Services and the Social Welfare Services on the district level.



The four model CHPS compounds will be provided with the technical requirements to install a 'telemedicine unit' to be also used as a 'social welfare contact point' and an appropriate budget for airtime for 12 months. This includes i.e.

- computer (laptop/ tablet/other)
 - moveable camera and audio functions
 - monitor
 - furniture for a separate closet
- b) It is suggested to support the health services and social welfare services with the technical requirements and an appropriate budget for airtime for 12 months for providing virtual visiting services to the selected CHPS compounds in their district. This includes i.e.
- computer (laptop/ tablet/other)
 - monitor
- c) It is suggested to develop an evaluation concept and evaluate the described activities after a period of one year.

5. REVIEW OF CITIZEN-COMMUNICATION SYSTEMS IN BOTH DISTRICTS

5.1. Background

Mobile technology has increased the reach and access to information among people. While its penetration is on the increase, studies from the FACIL ICT research and workshops conducted showed that most community members of Nsawam and Suhum municipalities do not have access to the contact of the district assembly, especially for health and social welfare information. Rather, they rely on ways of contacting the personal phone numbers of some officials of the district assemblies, liaising with the assemblymen of their communities, etc. to access information. While there is a high disparity between users of smartphones and feature phones.

Upon further meetings with some staff of the assemblies, it was realized that the various district assemblies have client service units responsible for incoming calls to the assembly. These contact numbers seemed to not be well known among members of the community. Further assessment showed that the communication system of the district assembly needed further upgrading both with regard to external communication and also within the district assembly. There seems to be a need to facilitate the transfer of information from the client service unit to the health, and social welfare unit or other requested units. As it will not be possible in a short-term perspective and within the ICT project to provide a new telecommunication system, a first step improvement could be suggested.

5.2. Proposed solutions

Below are proposed ways to facilitate the publicity of the contact numbers among advice-seekers from various communities and other externals:

- Develop a list of all relevant public agencies and units of the district assembly, zonal councils, and assemblymen with their corresponding contact details.
- Digitalize and disseminate on the website, and existing channels of communication and reflect on other ways of publication.

5.3 Work process for the realization

- The database could have the form of an excel-sheet and be layout in Siegen.



POSSIBLE NEXT STEPS

Based on the outcome of a meeting on 10th February 2023 with stakeholders from the municipal assembly, the following task is outlined as possible next steps of the project.

- Completion of the proposed prototypes that would be agreed on at the meeting
- Further deliberations of agreed prototypes in a final workshop/stakeholder meeting in Nsawam. The tentative date for the workshop/stakeholder meeting is set in the period between 23rd – 29th April 2023 (The research team from Germany suggests- 25th April for the meeting/workshop)
- Implementation of the agreed prototypes in collaboration with the Nsawam-Adoagyiri and Suhum municipal assembly.

-/Schä/PA

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