Content Development by Communities: Case Studies in the Philippines

Abstract:

Before the age of mobile telephony, personal computers, and the Internet, the mode of information distribution in the public domain, or the knowledge commons, hindered real-time, universal access to information on important subjects such as health, education, livelihood, and culture. Information and communication technology (ICT) created new types of demand for customized information, reinvented the form and means through which it is delivered, and enhanced the richness of the knowledge commons through the principles of collaboration and participation.

This paper is a technical study of three cases of community-based content development in the Philippines, namely: 1) the Molave Development Foundation's production of the *Water, Hygiene and Sanitation Modules* with the Maguinda Community; 2) the *participatory video projects* for the community by the University of the Philippines' College of Social Work and Community Development, PATAMABA and Sony Japan; and, 3) the *e-Knowledge Public Domain Pilot Project* in Barangay Payatas, Quezon City by the Philippine Commission on Information and Communications Technology (CICT), UNESCO and Intel. These projects gave community members access to the information they needed, trained them to use ICTs to develop their own digital content, enabled them to contribute to the knowledge commons, and increased their participation in the information society.

This essay aims to examine the methodologies these projects employed to train community members to develop content through ICT-enabled tools. It will also survey the different modes of community participation in developing this content, and will determine key lessons learned so as to contribute to the enhancement of government policy on content development for communities.

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In her work on ICT4D research, she prepared the Philippine proposal on the ASEAN Regional Workshop for Public Domain Information and Content Development, which was submitted and approved by the 6th ASEAN TELMIN in Brunei. She was also involved in the preparation of the Philippine proposal to the APEC TELSOM for a Regional Seminar on ICT capacity-building, which was submitted in April 2007 and is still subject to the Forum's approval. Ms. Rivera has co-written *Developing Human Capital Through a FOSS in Education Strategy* with Dr. Emmanuel C. Lallana and France June Bitanga, which was presented to the civil society and the Foundation for Media Alternatives in August 2006. She has also co-written country papers, one on the state of content development initiatives with Mr. Nelvin Olalia for the 2006 ASEAN Regional Workshop for Public Domain Information and Content Development and another on *Digital Localization* with Dr. Lallana for the UNESCAP Pan Localization Seminar in January 2007.

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Introduction

Access to information and communication technologies (ICTs) is now considered a right. The World Summit on the Information Society (WSIS) declared that ICTs are important tools for development and that immediate action by government, business, and civil society is needed to integrate every citizen into the Information Society[i]. Access to knowledge has now become an important developmental goal. WSIS has declared that with the right strategies and stable partnerships among the key global actors, it can actually be used to fast-track the narrowing of the gap between information "have's" and "have-not's".

The World Summit on the Information Society recognizes the need for more resources in our communities.

> "We are resolute to empower the poor, particularly those living in remote, rural and marginalized urban areas, to access information and to use ICTs as a tool to support their efforts to lift themselves out of poverty." (Geneva, 2003)

> *"*there is a need to consider the following other issues,which are relevant to ICT for development and which have not received adequate attention... (such as) Local government and initiatives based in local communities that deliver ICT services to communities in areas such as education, health and livelihood support.*"* (Tunis, 2005)

The role of ICTs in communities is important because ICTs facilitate profitable interventions into the communities to address developmental issues. Roger W. Harris, on community participation in his assessment of pilot telecenter projects in Mindanao, cites that "Information systems are more than technical artifacts. Rural users are the best placed to assess their own aspirations and to assign their own priorities with regard to which information systems they need ." (Harris, 2001, p. 9)

It is then important to emphasize that ICTs, on their own, are simply developmental *tools* and are only the means to an end. Many international and local developmental initiatives have been greatly preoccupied with financing projects that provided ICT capital and labor[ii] for developing and underdeveloping economies. Since the 1980's, policy and developmental strategies focused on projects that provided technology to the remote, rural, and marginalized communities. Richard Heeks, a professor in the Institute for Development Policy and Management in the University of Manchester and a known academic in the study of ICT4D concepts, refutes this current preoccupation on technology. In his Onion-Ring Model (see Appendix I), he points out that the the role of ICTs in development is to be the means to deliver information, which he considers to be the heart of an Information Society (Heeks, 2005). He comments that "Information technology is just a dead box in the corner of the room until you add what makes it an information system: information to handle; people to work with it; processes to contribute to." (Heeks, 2005b, p. 1) He asserts that proper ICT for Development (ICT4D) planning starts in understanding the role of information in the project's context which thus guides the proponent's decision on the appropriate ICT to use to support the information needs of the beneficiaries.

James Deane, the Managing Director of the Communication for Social Change Consortium in London, makes a similar point – that the developing world is not struggling because of a technological and digital divide. The crux of its developmental problems is the "information divide" (Dean, 2005, p.53). In an article he wrote to assess the 1985 Maitland Report[iii], Deane emphasized that the shift of the global development strategy, in response to the 2000 UN Millennium Development Goals and to country-specific poverty reduction strategies, also shifted the role of communication in society. He points out ICTs are developmental tools because of their capacity to secure economic inclusion (participation) in a globalizing and connected world. Also, Deane states that ICTs enable people to participate in the development process to access information about issues relevant to them and thereby gain a voice in those issues (empowerment). Thus, Deane asserts that the provision of ICT capital in a community should go hand-in-hand with strategies that will provide information (content) that will enable participation and empowerment in the World Information Society (Deane, 2005).

In line with this, WSIS agrees that if the heart of ICT4D efforts is content then there should be policies and developmental strategies that respond to the dearth of relevant content and technology applications that

address the diverse needs of local communities.

> "The creation, dissemination and preservation of content in diverse languages and formats must be accorded high priority in building an inclusive Information Society... . It is essential to promote the production of and accessibility to all content—educational, scientific, cultural or recreational —in diverse languages and formats. The development of local content suited to domestic or regional needs will encourage social and economic development and will stimulate participation of all stakeholders, including people living in rural, remote and marginal areas." (WSIS, 2003)

Community-based content development is the key to making ICTs relevant to the context of rural and marginalized communities, as well as responsive to their information needs. In this paper, it refers to a strategy in ICT4D initiatives that aims to harness ICTs to develop information that is based on local or indigenous knowledge through a participatory and inclusive method. The concept of participation is key to planning for and implementing such an undertaking.

This paper examines three case studies of community-based content development initiatives in the Philippines, a developing country in Southeast Asia. It presents the methods involved in the development of interactive multimedia content for health and sanitation, as well as a video that served as an advocacy tool for home-based workers. For each of these initiatives, the study defines the different levels of community participation and examines the challenges encountered. A summary of the lessons learned from the Philippine experience will be provided, which may prove useful in future content development strategies.

It is important to note that there is no blanket rule on what level of participation should be employed in community-based initiatives. Heeks (1999) warns developmental agents to be wary of the level of participation they will impose on an organization or community. He mentions that it is the political-cultural context, availability of time and resources, and the developmental agenda that will determine the type and level of stakeholder participation in the different stages of the project.

Heeks' concept is embodied in the context of the Philippine experience, which can be illustrated by the following spectrum.

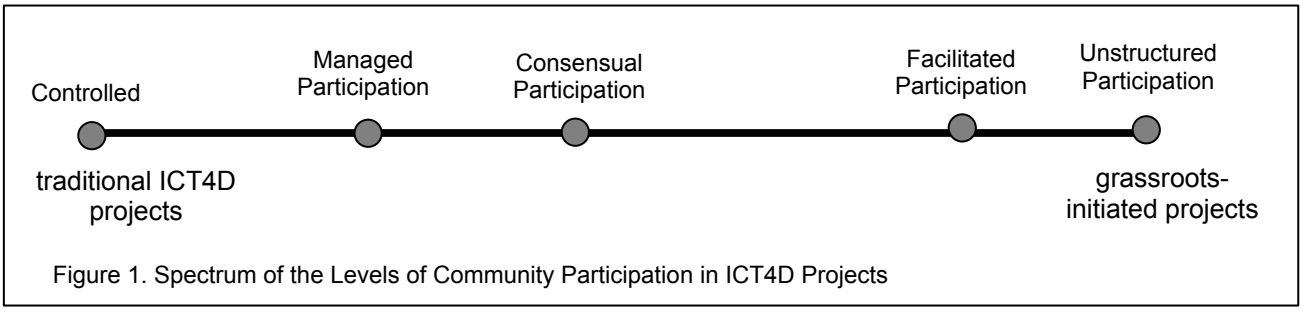

Figure 1. Spectrum of the Levels of Community Participation in ICT4D Projects

At one end of the spectrum is the *controlled* project, which represents the top-down, prescription management approach that many ICT4D projects used in the past. This particular approach is based on the principle that ICT projects are best planned by technology experts and professionals. Although some of them may have a semblance of stakeholder participation through consultations and meetings, most of them end up to be tokenistic and superficial in the actual implementation of the outcome of the meetings. At the other end of the spectrum is *unstructured* participation, where projects are initiated, managed, and sustained only by the communities themselves.

In the case of the Philippine experience, all three cases fall between the two ends of the spectrum. *Managed participation* involves the community at the level of determining preferences, providing information, and giving suggestions. Consultative meetings and workshops can be used to influence project design. *Consensual participation* facilitates community involvement by equipping them with the necessary skills to make informed decisions and be part of the production process. However, this form of participation gets strategic direction from an external developmental agent. These strategies are subject to consultations or other consensus-building activities where negotiations take place. Another level of participation is the *facilitated participation*, where

communities are given full reign over the planning and production stages, but with minimal guidance and assistance from an external development agent.

With this spectrum in mind, it is then apparent that the discussion of these three cases can provide a wider perspective on how community-based content development can be implemented in various contexts based on different development agendas.

The first case study is the E-WASH Module Project in Barangay Maguinda, Agusan del Norte, which highlights how an effective partnership with an influential people's organization rooted in the community facilitated a more manageable project implementation. It brings to light some of the difficulties in implementing ICT projects in rural communities.

The second case study is the Participatory Video Project, a collaborative project with the PATAMABA organization, which illustrates how an emphasis on the process proved to be both a challenge and a key component in capacity-building and encouraging ICT participation among marginalized home-based workers.

The third case study is about the e-Knowledge Public Domain Project. It features a partnership of different international and local institutions with business and civil society for capabilities, and provides crucial information based on a consensus among the key stakeholders in Barangay Payatas, Quezon City.

The Philippine Experience

The E-WASH Modules: Teaching Water, Sanitation and Hygiene in Rural Philippines

The E-WASH Module Project (WASH stands for Water, Sanitation and Hygiene For All) is part of the Water Supply and Sanitation Collaborative Council's (WSSCC) global WASH campaign to use ICTs to develop information and education communications (IEC) materials and tools for the promotion, education, and advocacy on appropriate water supply sources, proper sanitation, and suitable health practices.

The E-WASH Project was launched in 2004 in the telecenters in Smokey Mountain and Maguinda, Agusan del Norte to exhibit ICT Project implementation in both an urban and a rural community context. The two-year Project was developed through the funding of the International Development Research Center (IDRC) of Canada with the support of the CARAGA Regional Office of the Philippine Department of Science and Technology (DOST), the Philippine Council for Health Research and Development (PCHRD), and the United Nations Educational, Scientific and Cultural Organization (UNESCO). The main project proponent was the Molave Development Foundation, Inc. (MDFI), an organization based in Manila, which also served as the Training and Resource Center for Southeast Asia of the WASH Campaign.

- **The Maguinda Community: The Rural Community and ICT**

The Maguinda community was chosen as the E-WASH rural pilot study area. It is a barangay of Butuan City, Agusan del Norte in the Island of Mindanao. Located 24 kilometers away from the city center, it covers a total area of 1,500 hectares with pockets of residences scattered all over, separated by spaces of agricultural land. It has a total household population of 3,247, which is only 1.22% of the total household population of Butuan City. A majority of the Maguinda residents are engaged in farming activities. This agricultural community has six farm-to-market roads, with only one paved road.

Maguinda residents are mostly members of the quasi-religious organization, the Knights of Rizal Agricultural Endeavor Foundation, Incorporated (KRAEFI), whose Supreme Founder/National President is Datu Santiago B. Ecleo, Sr. Since the establishment of the barangay in the 1950s, KRAEFI has engaged in major livelihood programs for the community to develop the once field-forest ecosystem into a productive and progressive agricultural area. Most of the residents in the barangay are members of the KRAEFI, making it an effective partner in organizing the community. The organization has successfully kept the members intact in its values and belief system despite the distances among the residents' homes by providing communal livelihood programs and facilities that proved to be profitable and sustainable for the community.

The Maguinda Multipurpose Community Telecenter (Maguinda MCT) was established in April 2000 and was officially turned over to the barangay in 2001 under IDRC's Philippine Multipurpose Community Telecenter Project. The DOST Caraga Regional Office provided volunteer technical assistance by the request of the community. Through the E-WASH Project, a Very Small Aperture Terminal (VSAT) Satellite Internet connection, eight computer units, and computer laboratory furniture were added to expand the use of the telecenter. The Maguinda community donated materials and labor for the construction of the satellite dish's base and perimeter fence.

- **The Community on WASH**

Several stakeholder meetings, focus group discussions and key informant interviews were held to assess the community's information needs on water, health, and sanitation.

The baseline survey indicated that most of the community members had low levels of basic and ICT literacy. Despite the existence of the telecenter, many of the Maguinda residents still had no experience with computers prior to project implementation. During the meetings, the residents initially expressed their hesitation to use computers because they feared they would easily break them.

The survey also identified particular gender differences on the information interests in accessing ICTs. It determined that the men were more inclined to obtain information on their agricultural livelihood, such as new farming techniques, product pricing, and the weather, while the women were more interested to use ICTs for communicating with friends and loved ones in the city or in other countries (Triñona, 2006).

The community's water, hygiene, and sanitation habits were also identified during the baseline study survey. It determined most of the residents obtained their drinking water from either a deep well or spring and had water-sealed latrines. They would also burn their garbage as their regular practice for waste disposal. Although all of the respondents made it a practice to wash their hands before eating, only half of them bathed daily.

To address the community's concern that people with all levels of literacy would be able use the computers, MDFI employed the use of music, voice, Flash-based animation and video in module development. It was also determined through stakeholder consultations that the modules, which were originally written in Filipino, should be translated into both English and Cebuano, the latter being the local dialect in the barangay. The people's fear of computers was also addressed by developing modules that used a simple point-and-click navigation system, making it easier for the participants to navigate through the modules during the pilot tests.

There were originally six WASH Interactive Modules: personal hygiene, dengue fever, diarrhea, scabies, typhoid fever and environmental hygiene. These original modules were developed in Smokey Mountain by the Sandiwaan Learning Center (SLC) and MDFI using Macromedia Flash. During the development phase, the Teacher Community Coordinators (TCCs) of the Alternative Learning Services of the City of Manila designed the storyboard and wrote the content. The Project partners coordinated with the field volunteers in Maguinda through the WASH Research On-line Survey (ROS) System, an online database system of the study population, which produced research reports as basis for module development. The Maguinda MCT volunteers used this to input data from the field, which was sent to the servers in Manila for storage and analysis.

On top of these six modules, the Project decided to produce two other modules called Health and Hygiene at Home and Hygiene and Safety in the Farm. These were developed with the direct participation of the members of Barangay Maguinda in planning and direction-setting for module development.

To accomplish this level of participation, the Maguinda community leaders and members were given a one and a half day Writeshop by the Project Partners and the Maguinda National High School. This provided a venue for the participants to conceptualize and develop the content of the two modules based on their community values and preferences. During the Writeshop, the participants identified their health concerns on hygiene and sanitation for mothers, children, and farmers. They were taught the basics of storyboarding and scriptwriting. At the end of the Writeshop, the participants submitted the modules' storyboards, proposed to

include videos, and presented skits of their suggested plots for the videos.

Using the script and the suggestions from the Writeshop, the MDFI development team translated the community's ideas into the interactive modules. Several community members were even asked to participate as actors during the video production.

- **The Challenges of Content Development in the Rural Area**

The Project had to overcome challenges of introducing ICTs to a rural community while still being sensitive to their context. Due to the distinct socio-economic characteristics of the community, the proponents had to redesign their modules and reconfigure their strategy in teaching the residents how to use the computer. The Project had to let the residents familiarize themselves with the technology in a way that would be comfortable to the latter. The last two modules developed for mothers, children, and farmers came out of a deeper understanding of what the community believed it needed to know regarding WASH.

The distant, rural community of Maguinda also posed several technical challenges to the Project. It took the participants three weeks for the sixty community members, who participated in the pilot test, to go through the interactive modules because of problems with the available bandwidth in the site. Due to the large volume of data coming from Manila, it took hours for a single module to be downloaded in Maguinda. The bandwidth performance also fluctuated because the VSAT's performance was also dependent on weather conditions. To address this, the project proponents redesigned their strategy to distribute the modules to the MCT via CDs instead.

The e-Knowledge Public Domain Project: Developing Content for the Community

- **Public Domain for the Communities**

It was the express aim of the e-Knowledge Public Domain (eKPD) Project to address the information needs of the underprivileged, underserved, and marginalized sector through the use of existing Community e-Centers (CeCs) as information access points for the communities. It sought to develop content sourced from the public domain on information areas such as education, health, small and medium enterprises, and agriculture.

The eKPD Project envisioned that marginalized and underserved communities would be more involved in the creation, development, and exchange of information through ICT tools. The community participated in the Project through several consultation workshops and a training workshop. The Project intended to position the Payatas CeC as the community's training and experiment laboratory in future content development activities.

- **Barangay Payatas**

The pilot site for the eKPD Project is Barangay Payatas, which is located at the northeastern part of Quezon City, along the periphery of the municipalities of Montalban and San Mateo of Rizal. It has a land area of 2,818 hectares (28,180,000 sqm), which is 17.49% of Quezon City's total land area. The area is divided into three: Payatas A (main market and commercial district), Payatas B (mostly informal residences and institutional buildings) and *Lupang Pangako* (translated Promise Land, where the dump site and few scattered informal settlements are found). The 2000 national census stated that the total population of the barangay was 200,000. The majority of its population lives in informal settlements and belongs to the lower income class, even living below the poverty line.

Barangay Payatas is one of the most publicized communities in the Philippines because of two things: first, the existing landfill that attracted scavengers to settle down in the mid-80's, which eventually led to the establishment of a densely-populated barangay; and second, the strong presence of civil society organizations involved in community-building and livelihood projects in the barangay.

The Payatas dump site has been the main garbage depot for most of Metro Manila's garbage since 1995 upon closure of the main dumping site, Smokey Mountain. Having been in operation for 30 years, it is now a 15-hectare open-pit dump site divided into two adjacent sites for dumping, each with garbage piles going as high as

32-40 meters.

In July 2000, heavy rains caused a portion of the second site to slide, killing 250 people. This forced closure of site 2, but in recent years it was reopened due to an absence of alternative sites for dumping. At present, the government has limited dumping in the site to garbage from only Quezon City.

The Payatas barangay health centers in Payatas A and B serve as the main government service centers for public health care in the community. As of 2006, there were two doctors, two dentists, three nurses, one medical technician, one laboratory aid and two sanitation inspectors serving the residents. The local government of Barangay Payatas also has employed a total of nine barangay nutrition scholars (BNS) and eleven barangay health workers (BHW) who were then trained to provide support to the barangay health center staff.

Barangay Payatas also hosts of the only Commission of Information and Communications Technology (CICT) CeC in the National Capital Region known as the Global Multi-media Access (GMA) Telecenter. The CeC, manned by one CeC manager, is equipped with a server, three client computers, several printers, and a scanner. It offers Internet services, greeting card printing and sending services, e-Center electronic messages (telegram), and electronic money transfer (telegraphic transfer). During its first months in the community, the CeC manager offered free basic computer literacy classes to the community members.

- **The Payatas Pre-workshop Consultations**

The Project held the eHealth for the Community Workshop in August 2006, which convened health professionals and content developers from the government, academe, business, and civil society. From the workshop groups, the top ten health issues identified were (in no specific order) the environment, water and sanitation, diarrhea, high-risk pregnancies (especially among teenage girls), malnutrition, parasitic diseases, respiratory diseases, tetanus, skin diseases, and vector-borne diseases.

There were also several focus group discussions and consultation meetings conducted with the leaders, health workers and members of the community. During these consultative meetings, four particular health concerns stood out as the top priority subjects of the computer-based modules: pneumonia, tuberculosis, parasitism, and diarrhea. Through these engagements with the community, the health center staff recognized how digital health content could potentially enhance the effectiveness of their public education program to the women and children in the community. The consultations also identified the health information needs of the community, which became the framework of the modules storyboard.

Payatas Health Information Needs

- Nature of common diseases
- Health and nutrition status of the community regarding a specific disease
- Where to go for health problems
- Easy-to-follow measures to take for common diseases
- Preventive measures for specific diseases, health and wellness
- Available health programs
- Available alternative health care and home remedies that are scientifically-based
- Promotive measures (e.g. no smoking, diet, etc.)
- Directory of health experts in the area

Source: eHealth Content for the Community Workshop conducted in 4 August 2006

- **The Payatas Development Training-Workshop**

A Payatas Core Development Team was formed to participate in a 28-day Content Development Training-Workshop, held for eight hours each day. The objective was to direct the Team to develop four health modules on a simple web interface. The modules were presentations of the identified health concerns of the community.

The Payatas Core Development Team was composed of 13 out-of-school youth (OSY) and six barangay nutrition scholars (BNS) from the community. The out-of-school youth were selected from a two-week training under the CICT's Computer and Internet Literacy Course (CILC), which was held two weeks before this activity. The barangay captain appointed the BNS to serve as guides in writing out the content. The CILC was crucial for ensuring that all participants were more or less of the same skill level in their use of ICTs.

The Workshop was designed to build the Team members' competencies on basic public health research, storyboarding, image manipulation, image generation, animation, and basic web authoring. During the course, the Team used Open Office Impress, Inkscape, Xara Extreme, GIMP, and nVU, all of which are free and open source software (FOSS). The course was also designed to combine both lectures and hands-on exercises to provide step-by-step mentoring for the members. Weekly consultations were held where the Team presented their output for evaluation by a panel of e-Learning and multimedia content development experts from the academe, business, and civil society. To validate the content, there were also one-on-one consultations with the community health center doctor. At the end of the Workshop, the Team publicly presented the four modules to the project partners and barangay leaders.

It was the goal of the eKPD Project for the health workers to use the four health modules during their public education sessions and for the public to access these modules through the existing CeC.

- **The Challenges of Creating Health Content with the Community**

The Content Development Team members' initial apprehension and lack of experience in using computers posed a challenge to meet the Project's one-month timeline, but these were addressed by modifying the final output and designing a training curriculum. Initially, the plan was to produce interactive multimedia health modules, but with the given constraints it was decided upon that the modules would be presented using only text, images and basic animation without sound and video. With this new design and the team members' skill levels in mind, the month-long training focused more on teaching basic graphic design, animation, and web authoring skills, and followed a schedule that required a weekly output. It was from this output that the four digital modules were eventually built.

A second concern was ensuring the integrity of the health content because most of the team members were not technically equipped to author public health information. The BNS in the team provided direction for the rest of the members in researching online, procuring public health IEC materials, and conducting community interviews. The BNS, however, lacked formal medical training despite being community volunteers trained to assist the health center staff in administering certain health services. Thus, it was still necessary for the community physician to validate the medical terms and concepts used in the development process.

Participatory Video for Home-based Workers

The Participatory Video (PV) Project is a collaboration of the University of the Philippines College of Social Work and Community Development Research and Extension for Development Office (UP CSWCD REDO) with the members of the National Network of Informal Workers in the Philippines (*Pambansang Tagapag-ugnay ng mga Manggagawang Pambahay* or PATAMABA), with the technical support of Sony Japan. The UP CSWCD Department of Women and Development Studies also provided assistance to the Project. The PV Project was launched in 2006 with the aim to tell, through a video presentation, stories of the struggles and hardships that PATAMABA members had undergone in establishing and maintaining their livelihood. Participatory video is a form of action research, which seeks to communicate a message that would propel the viewer to act upon these issues. Thus, the film intended to invoke interest for supporting home-based workers.

- **Collaborative Partnership for the Informal Sector**

PATAMABA is a non-government, non-profit people's organization that serves as the coordinator of the national network for home-based workers. PATAMABA has 14,138 members as of 2006 and seeks to strengthen, consolidate, and expand the network and provide support services for the improvement of the personal, economic and social well-being of its members. The organization helps home-based workers, 98% of whom are women, assemble themselves into self-sustaining groups at the grassroots level. It also advocates for policy changes that would address the needs and issues of this informal sector (www.homenetseasia.org/philippines, 2006)

PATAMABA's National Management Committee (NAMANCOM) spearheaded the planning, coordination, and direction-setting for the Project with the guidance of the Project partners. The NAMANCOM was also

responsible for disseminating information and coordinating their members who would be directly involved in the Project. As their resource counterpart, PATAMABA agreed to provide for the transportation, food, accommodation, and supplies for the project facilitators and participants.

The UP CSWCD's Fieldwork Instruction Program was the venue through which undergraduate and graduate students were placed in various communities to gain experience and involve themselves in programs to help in addressing the needs of these communities. In this program several CSWCD graduate students and REDO staff participated as *connected facilitators* in the participatory video process. A connected facilitator is a teacher who is immersed with his students for the purpose of guiding them through the process of formulating their learning objectives and developing a "more authentic voice of learning." (Cruz, 2007)

Sony Japan served as the technical partner for the Project. The company loaned the Project a 3CCD mini DV digital camera, boom microphone, and an editing machine, which were housed in CSWCD for the use of any of the Project partners.

PATAMABA had prior experience producing a video when they produced *Ang Pagsisikhay ng mga Kababaihang Manggagawa sa Bahay* (The Diligence of the Home-based Woman Worker) through another project with a different group. The video was used as an advocacy tool to lobby the Magna Carta for home-based workers.

- **The Participatory Process of Video Production**

The Project lasted for six months, from conducting consultations with the NAMANCOM of PATAMABA to the final stages of post-production. During these consultations, PATAMABA chose the Baguio, Cubao, Pangasinan, Balingasa (Manila), and Rizal chapters to be featured in the 20-minute audio-video presentation entitled *Lifestories of Informal Workers*.

During the planning stage of the project, the connected facilitators conducted a commitment-setting workshop where the Project partners agreed upon a set of commitments on objectives, scope, resource counterparts, and deadlines. This commitment agreement was an important document that guided the partnership and process of project implementation. PATAMABA chose a core group, which consisted of a CSWCD faculty supervisor, CSWCD REDO representative, CSWCD graduate student, and a PATAMABA agency supervisor.

During a pre-production consultative workshop, the NAMANCOM also set the work plan, budget, and schedule for the production and post-production process. The consultative workshops conducted in the selected Project Site allowed the PATAMABA members to tell their own stories, tracing how they developed their products throughout the years. They were also given an opportunity to evaluate their present situation, to identify issues, and to articulate their goals for their organization. The output of the workshops became the research material for the film.

The Project also conducted several workshops, each with four modules, with the PATAMABA members who were to be part of the actual production of the video. The first module was for perspective-setting where the facilitator and participants leveled off their knowledge and experiences about the development issues of the informal economy[iv] and the role of participatory development in addressing these issues. This was followed by a second module on participatory video theory, which served as both a discussion on PV as a form of participatory communication and an orientation to the work that they would be undertaking during the production and post-production process.

The next two modules used games and hands-on exercises to teach basic videography, basic image editing, and basic video editing (both linear and non-linear). The team was also taught proper equipment handling and maintenance. The facilitators used a one-on-one peer-mentoring system to set mutual accountability in learning the production and post-production process. During the hands-on activities, the participants regularly shifted roles to learn different skills in production and post-production. They were encouraged to share with the production team member, who was to take over their post, what they had learned from their experience.

During the shooting sessions, the production team was organized based on actual production crew line-ups to instill in them the responsibilities and ethics of professional media practitioners. The raw footage taken during the hands-on activities was viewed after every shooting day during their cliniquing sessions, in which the production team was asked to choose which shots to include in the video and which clips needed to be reshot. The basic principle was that they were not allowed to fast forward any of the scenes so that they would recognize the value of each member's contributions to the whole effort.

A general script served as a conceptual framework and a guide to plan for the scenes needed to be shot during production. However, the detailed content was not scripted. The stories that came out from the interviews provided the content, which was later woven together in the editing room. The story unfolded during the process of interacting with the PATAMABA members in production and though less structured, it proved to be a more effective and natural means of bringing out the ethos of the community being featured.

Table 1. Sample Format of the Script Used During the PV Production and Post-production

Core Message	Narrator	Dialogue	Visual
❑Introductory Phase: Surface issues and to make a public call to sustain the financial needs of their members (development perspective) ❑Sharing the unique story behind the products of identified PATAMABA communities as follows: Highlight their unique struggles Highlight their successes Surface their continuing challenges ❑Closing: Surface their unique role as women and as workers in a globalizing economy (gender perspective)		*identified possible interviews with key persons and lead agencies such as Fair Trade Alliance, Stakeholders (members), regular costumers, and key interviews on globalization and value chain analysis.	*identified and selected visuals/ video footages

Source: Ma. Gichelle A. Cruz. 2006. Sharing the Power of Communication Technology for Empowerment and Social Transformation. Hottenet Southeast Asia, p. 10.

An important dimension of this process was that the production team first sought permission from the actors and interviewees before shooting their scenes. Whenever it was necessary, the crew also informed them if their shots were not going to be in the film and explained to them the reasons for deleting these scenes.

The Project produced a second video entitled *Disenyo at Likha*: Fashioning Fair Trade (Design and Creation: Fashioning Fair Trade). It featured the smocking industry of Angono as a social marketing tool for the community and tells the story of how the industry has been greatly affected by the rise of globalization. The production took only a month for this video because the production team was already technically equipped and already had an established set of roles and dynamics within the group. Just like the first production, it was based on a general script featuring interviews of PATAMABA members in Angono who spoke about the challenges they faced in maintaining their livelihood against the rising competition of imported products in the market.

- **The Challenges of Participatory Video Production**

The project's work plan were not followed and deadlines were not met because it was difficulties of the

participants to overcome the steep learning curve. It was tempting for the connected facilitator and mentors to rush through the process by taking over some of the jobs assigned to the PATAMABA members. The value of the participatory process lies in that it equips the participants with technical skills, transforms their attitudes towards themselves and their community, and ensures that they have ownership of the content. Therefore the commitment agreements formulated during the planning phase reminded both the facilitator and the PATAMABA production team about their prior arrangements, including the procedures they had to implement and the deadlines they had to meet.

A greater challenge that the PV Project faced was the issue of sustainability. Like most other grassroots organizations, it was difficult for PATAMABA to establish networks with funding agencies without assistance by experienced community organizers. The two videos they produced have been valuable tools for the organization to promote its advocacies in several regional fora and to give it a voice to communicate about the daily experiences of its members.

PATAMABA is also currently looking for opportunities to own a camera and editing equipment, which it could use to produce videos for advocacy and livelihood how-to's for its members. The members could also use their new skills and equipment to put up a small business to raise funds for their organization.

Creating Content with the Community: A Spectrum of Strategies

The three cases have shown the value of directly involving marginalized, underserved, and rural communities in ICT4D efforts, especially given that they have been excluded from the benefits of ICTs in their lives. It is important to note that although the goals of inclusion and participation of communities were present in all of these cases, the strategies and challenges for each of them were varied. Table 2 is a matrix detailing the similarities and differences of these three cases.

Table 2. Comparative Summary of the Features of the Three Case Studies

Features		E-WASH Project	PV Project	eKPD Project
What type of ICT was used?	hardware	mini DV camera, PC	mini DV camera, non-linear editing machine, PC	digital cameras, PC
	software	Macromedia Flash, Adobe Photoshop	Adobe Premier Pro, Adobe Photoshop	Open Office (specifically Impress), Inkscape, Xara Extreme, GIMP, nVU
What was the subject to be tackled by the Project?		Health: water, sanitation and hygiene	Life stories of informal workers in 4 PATAMABA chapters and the smocking industry of Angono	Health: diarrhea, pneumonia, tuberculosis and parasitism
How was the community organized for the Project?		Through a people's organization, KRAEFI	Through a grassroots organization, PATAMABA	With the assistance of the Barangay Payatas LGU* and the health office
What was the source of information in content development?		DOST's and rural health unit's IEC materials; baseline survey conducted by MDFI	Interviews of the PATAMABA members	DOH's and the rural health unit's IEC materials; the Internet; interviews with the barangay physicians nurses, and health workers
Who were the project partners?		International funding agency, regional office of a national government agency, the barangay LGU*, a foundation and the people's organization	Academe, private corporation and the grassroots organization	An international organization, a national government agency, a private corporation and the LGU*
Who managed the different stages of the development process?	Pre-production (including planning and resource matching)	KRAEFI, community leaders along with MDFI, DOST-CARAGA, Maguinda LGU, Maguinda public elementary school	PATAMABA with the supervision of the connected facilitator	The project proponents in direct consultation with the community leaders and the health office
	Production (film shooting, producing images and sound, etc.)	MDFI, DOST-CARAGA with some community members as the actors	The production team organized consisting of the PATAMABA members and the connected facilitator	The content development team under the supervision of the barangay physician and the workshop facilitator
	Post-production (editing, programming into web-based interface, etc.)	MDFI	The production team	The content development team under the supervision of the workshop facilitator
What was the output of the community?		The storyboard and script for the two modules on WASH for mothers, children and farmers.	Two audio-video presentations	Four digital modules

Note: LGU stands for the local government unit.

In addition to this, the project proponents' notion of the community's level of participation differed in each of projects, thus giving insight to policymakers into the dynamics of planning and implementing community-based content development.

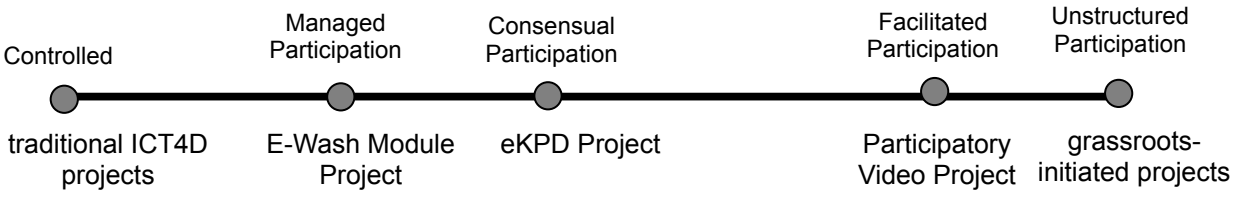

Figure 2. Spectrum of the Level of Community Participation of the Three Philippine Case Studies

The E-WASH Module Project is categorized as *managed participation* because it involved the community only at the level of direction-setting. The Project Partners conducted consultative meetings, focus group discussions and a Writeshop to provide a venue through which the Maguinda community could participate. Through these activities, the community voiced out their preferences with regard to the look-and-feel of modules and which language should be used. They also provided the necessary information to write the content in their context. The Project enhanced the community's ICT capacity in terms of validating the content and testing the modules but not in terms of producing the digital media.

The eKPD Project is a form of *consensual participation* because there was a continual process of consensus-building between the stakeholders in the community, the health experts, and the project partners. The Project started from a goal and a strategy that was determined by the Project partners, who acted as the external development agents. Through consultation workshops the community was given a greater role in determining their preferences and information needs. Unlike managed participation, however, the Content Development Team members were trained to be part of the production process and worked closely with the health experts in the community, thereby enabling them to make informed decisions.

Further across the spectrum, the PV Project is an example of *facilitated participation* because of the limited role that the Project Partners played in the process. The Project guidelines were drafted from the commitment agreement written by the PATAMABA members under the supervision of the connected facilitators. Also, during the production process, the PATAMABA members were given freedom to make decisions with minimal intervention by the Project partners. The role of the connected facilitator was simply to ascertain that the output was produced to meet the deadlines, and to equip the production team with necessary skills to effectively convey their intended message through the video.

Content for Community Development

These Philippine case studies draw up several important insights into the role and the contributions of community-based content development to address the dearth of information that should otherwise empower these communities to gain social, economic and political development.

First, community-based content development was a strategic response to the information needs of the communities because it was founded on their socio-economic context, cultural idiosyncrasies, and local knowledge. Thus, the content developed from these projects became an expression of their ethos through digital media, which enhanced the relevance of the information to the communities and in fact served as the first steps for their voice to be heard by those who have the authority to influence change.

Second, it is evident from the case studies that community-based content development was a propeller for capacity-building. Community members were equipped with ICT skills, thus incorporating them into the ICT-enabled labor pool and getting them started down the road toward greater participation in the global economy. Acquiring such skills also increased their appreciation of the significance of ICTs to their daily pursuits and struggles.

Third, these initiatives created the necessary demand for ICTs. In one sense, they identified the communities' information needs and thereby justified introducing the appropriate ICTs that would address those needs. Once the community members had acquired the skills for ICT and appreciated its value to them more deeply, they then gained the confidence to explore the technology further and find new applications for it in other areas of their lives.

Fourth, these experiences affirmed that the community's context and information needs are major factors in planning for ICT capital and labor requirements; hence, there is no one-best approach for these types of projects. It was a common finding that the more the project proponents prescribed their own ICT capital and labor requirements, the more adjustments tended to be made to these requirements to suit the community's needs. It was therefore important to provide venues for consultation in order for the participants to communicate their ICT preferences; however, it was equally important to give ICT professionals some room to evaluate the appropriateness of these preferences to ensure the technical sustainability of these initiatives.

Lastly, a meaningful and productive community-based content development project involves not a limited partnership between the community and an external agent, but a collaborative alliance of government, business, international funding agencies, and development organizations, whose work is deeply-rooted in the community. These actors pooled together their resources, each one having a role to play and making their own unique contribution to the development effort, to come up with a sustainable, multi-stakeholder strategy in project planning and implementation.

Community-based content development can then be a strategic and sustainable solution for the narrowing of the digital divide. The mere deployment of ICT capital and labor will not be profitable for beneficiaries unless it delivers appropriate *content*. The struggles of marginalized, underserved, and rural communities can be dealt with through ICT4D initiatives that are rooted in their contexts and are able to invoke participation from their members. There are boundless opportunities in this developmental approach that may pave the way for these communities to finally benefit much from this information age.

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The Molave Development Foundation, Inc. can be contacted through their website http://www.molave.org. PATAMABA can be contacted through their website http://www.homenetseasia.org/philippines/rizal.html, e-mail at patamaba@yahoo.com or phone number +632 435 2200.

i The Information Society or Knowledge Society is a society that views information and knowledge as the central element of production. It assumes that “new technologies and knowledge workers are essential in the transition from an industrial society to knowledge society.” Daniel Bell (1973) believes that in order to be a genuine information society, there should be a restructuring of the economy, technology and occupational systems. (Saloma-Akpedonu, 2007)

ii Based on a 2005 Orbicom Study on Infostates and Development, ICT capital is “the network infrastructure, ICT machinery and equipment” including the hardware and software that most people are familiar with. ICT labor are the stock of ICT skills found in a labor force, most often measured by the number of people employed in IT businesses and projects.

iii The Maitland Commission Report was written in 1985 for the International Telecommunications Union to make recommendations regarding the telecommunications sector. The Report gave empirical evidence that there was a link between a country's telecommunications network and its rate of development. It became the groundwork for the move towards liberalizing the sector and policy-making for succeeding international fora, such as the WSIS.

iv The informal economy is the sector of the national economy, which is not operating under legal and regulated frameworks by the governing institutions (ILO, 2002). It is often simply defined as the economy in which those who do not belong in the formal economy work in.