

***"Mobilizing Island Communities to Sustain Television-Based Instruction:  
The Knowledge Channel Experience in Mindanao"***  
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**I. BACKGROUND: USING CORE COMPETENCIES FOR THE PUBLIC GOOD**

In November of 1999, a different type of programming hit the Philippine airwaves. It was the first all-educational television channel meant primarily to service the public educational system; and it was called the Knowledge Channel (KCh).

Borne out of a need to improve the dismal quality of the public educational system, its creator, Rina Lopez Bautista (of the Lopez business conglomerate) and a cousin, Carlo Katigbak (currently head of the newly-merged Skycable/Homecable company) dreamed of and drafted the parameters of a business plan for the non-profit venture. Believing that the only way out of intergenerational poverty was sound and quality education, Bautista and Katigbak crafted the plan and made moves to crystallize their dream.

The Knowledge Channel was to be a Channel with a major part of its programming dedicated to instructional programs anchored on the Department of Education's basic education curriculum (BEC). These programs would have to be acquired from local and foreign sources; and would have to jive with both the elementary and secondary levels' curricula. Specific topics which could not be sourced locally nor from abroad would have to be produced from scratch. The programs would all have to be tested for acceptance by projected end-users – poor public school students. Capital expenditures such as editing equipment, state-of-the-art cameras, fiber optic cables, facilities for a playback or technical operations center would have to be sought. A system for broadcasting all of the programs simultaneously and nationwide would have to be located. And lastly, a way of connecting as many public schools as possible to the Channel would have to be looked for.

The duo scanned their corporate environment and found the ingredients for the realization of their dreams within the immediate vicinity. The ingredients all lay within arm's reach: the Lopez companies' core competencies in satellite broadcasting, video production and cable technology fit the dream to a tee.

The financial plan involved raising capital from amongst companies within the Lopez Group; and this was done by presenting a sound and sustainable plan of

action to its executive committee. With the Lopez patriarch, Oscar Lopez, convinced of the laudability of the endeavor, P55M was contributed by the various companies as initial working capital. In return, companies such as First Generation Holdings, MERALCO and Bayantel would become patrons of selected public schools. With this, the necessary equipment was purchased, educational programs acquired from abroad and a skeletal staff was recruited. In-kind contributions were made by ABSCBN Broadcasting Corporation, which gave a portion of its full-time leased transponder space on PanAm Satellite 8 for the Knowledge Channel to beam its signal from – free of charge. This enabled the Knowledge Channel programs to be seen simultaneous and nationwide from Batanes to Tawi Tawi and wherever ABSCBN was seen. Skycable Corporation cabled most of the public schools within their franchise areas; also for free. The ABS-CBN Foundation’s E-Media program allowed the Knowledge Channel to air its produced programs like Sineskwela, Mathtinik and other programs at no charge; with a proviso that should revenue be earned from them, the revenue would be shared.

Knowing that the technology-based intervention would not have any teeth unless its major stakeholder were involved, a one year, and eventually a ten-year Memorandum of Agreement with the Department of Education (DepEd) was struck whose main proviso was the *mandatory viewing of the Knowledge Channel by public schools which had it*. The DepEd MOA and its Implementing Guidelines is attached as Annex A.

To sustain the Channel, it would raise revenue through limited institutional advertising; banning commercial products like liquor and cigarettes from its airwaves.

All the ingredients were now in place for a full-fledged all-educational channel on cable – a channel epitomizing corporate social responsibility in its finest form: private effort for the public good. The model was a first in the Philippines and in the world.

## **II. COMPONENTS OF THE PREMIERE EDUCATIONAL CHANNEL**

The Knowledge Channel is run by the Knowledge Channel Foundation, Inc., a non-stock, non-profit corporation registered with the Securities and Exchange Commission in 1999. The 30-personnel-strong Foundation is headed by a 9 - member Board of Trustees chaired by Oscar Lopez and vice-chaired by Eugenio Lopez III of ABSCBN.

The four major components of the program are:

Programming. The Channel runs 18 hours a day of educational programs; 14 hours (77%) of which are video programs based on the Department of Education's basic education curriculum (BEC). These programs are weekly 20-minute episodes which cover all subject areas in both the elementary and secondary levels; fulfilling the Department's minimum learning competencies in both levels. In order for the Channel to be of service to public schools which have multiple shifts and/or are highly populated, these video episodes are replayed 6 – 8 times a week on different time slots and different days. Three types of program options are available for teachers to choose from: foreign programs in English, locally-produced programs in English, and locally produced programs in Filipino. The programs are upgraded as needed.

Access. From funds solicited from the public and private sectors, the Knowledge Channel Foundation has been able to provide some 1600 schools in more than 40 provinces with the Knowledge Channel at no cost to the schools. Access to KCh is gained through one of two modes: through cabling in areas where there are cable operators; and through wireless technology or satellite dishes in remote areas. The Foundation has generated support and forged partnerships with more than a hundred cable operators all over the archipelago who have dutifully cabled public schools in their areas as part of their corporate social responsibility. The cable operator partners (COP) have also agreed to provide maintenance service for free for at least one year.

Support Programs. DepEd administrators, principals and teachers of recipient schools are trained on "TV-Assisted Instruction", a 2-day seminar workshop designed to assist teachers in integrating the technology-based intervention into their teaching methodology. Yearly program guides which contain the Channel's daily schedule and episode synopses, and teachers' guides containing lesson plans matched with KCh video episodes are distributed to all beneficiary schools in advance. This is in order to enable KCh schools to draft their schools' viewing schedule to maximize the use of school's designated Knowledge Channel viewing room.

Monitoring and Evaluation. Most programs on KCh are pre-tested amongst its prospective end-users for appeal and comprehension to ensure that the episodes

to attain their objectives of raising the academic performance of students. Recipient public schools' proper and regular usage of KCh is monitored on a regular basis in a variety of ways: log sheets filled up by teachers collected monthly by KCFI, unannounced school visits by KCFI personnel, and occasional phone calls; among others. The impact of the Channel on its end-users is measured through outcome assessment studies conducted at the end of each project's cycle; copies of which are provided to the social investors/donors.

### **III. PARTNERING TO ENSURE SUCCESS AND SUSTAINABILITY**

*“Considering the mammoth size of the Philippine educational system, the only feasible medium for delivering high quality instruction is through the application of modern information and communications technology.” (Phil. Human Development Report 2000)*

Currently, the public educational system services around 18.5 million students distributed throughout its 42,000 schools in thousands of islands. The country's archipelagic nature has indeed made the Knowledge Channel an ideal educational intervention for this young constituency because of its satellite footprint and curriculum-based content. But the Herculean task of spreading its benefits to as many schools as possible warranted huge amounts of money; prompting the Foundation to seek partners to ensure its success and guarantee its sustainability.

The Department of Education has previewed and critiqued Knowledge Channel programs to determine their compatibility with the Institution's grade and high school curricula. KCh programs have been found to fulfill minimum learning competencies for both levels.

Over 113 cable operators including Skycable/Homecable have voluntarily partnered with the Knowledge Channel; sealing the partnership with a MOA which stipulates that the cable operator partner (COP) is to cable public schools within its franchise areas for free and provide maintenance service as part of its corporate social responsibility. So far, \_\_\_\_\_ schools have been connected through these partnerships; with more COPs joining the queue. KCFI/COP sample MOA is attached as Annex B

Program suppliers and providers such as the government's Eskwela ng Bayan, the Women's Media Circle, the National Broadcasting Network's "Continuing Studies Through Television" (CONSTEL) and other educational program suppliers

have contributed their programs for airing, free of charge. All told, the Knowledge Channel airs eighteen (18) hours a day of purely educational programs made possible by such partnerships.

Publishing houses such as Vibal Publishing and Bato Balani Foundation have partnered with KCFI by printing its Program and Teachers' Guides as their contribution to bettering the public educational system.

Over 500 local, foreign, public, private and public donors have made the social investment in this communications technology-based educational intervention; most of which have made direct contributions to provide schools with access to KCh. Business corporations have of course chosen to provide the ETV infrastructure to schools within their areas of operations. To date, 1,678 public schools servicing 2.75M students in 46 provinces and 140 municipalities and cities have been linked to the channel via cable technology or satellite dishes.

#### **IV. TEAM-Mindanao: VENTURING INTO CONFLICT AREAS**

KCFI's most significant donor to date is the United States Agency for International Development or USAID which sounded a call for proposals in March of 2004. The call to public/private alliances "to carry out activities in support of USAID/Philippines' Education Strategic Objective: Increased Quality Education and Livelihood Skills in Selected Areas"; focused primarily on the Autonomous Region in Muslim Mindanao (ARMM). The call further stated that "proposals bringing at least a 1:1 resource matching to focus on education will be considered but a 3:1 resource matching is highly desirable."

KCFI submitted its proposal with a 2:1 match of resources and was awarded a 3-year grant for project called Television Education for the Advancement of Muslim Mindanao, or TEAM-Mindanao.

Up until this project, KCFI had never ventured into areas of conflict; but the challenge was met head-on.

##### **A. Program Description**

The objectives of this project echoed the priorities set by the USAID. It focused on the education sector, addressing the need for a strategic and innovative intervention in the Autonomous Region in Muslim Mindanao (ARMM). Alliance partners comprising TEAM-Mindanao contributed cash and their expertise in

communications technology, broadcast media, education, electrification and educational television to deliver the services to the target beneficiaries.

In its proposal, KCFI maintained that “the ETV approach is technically, economically, financially and socially feasible as KCFI’s past experiences had proven. The strength of this intervention lies in sustained public-private partnership, one that has been maintained and continues to expand and strengthen in the last five years. “

TEAM-Mindanao’s major components are:

1. Provision of Educational Television to 150 public schools in ARMM and Regions 9 and 12 through wireless technology or satellite dishes (the ETV infrastructure includes a 2-meter wide satellite dish, a digital satellite receiver and a 29” TV set); and
2. Production of a 10-part video series on “Business and Livelihood Skills for the Out-of-School youth in conflict areas for airing over the Knowledge Channel; and
3. Production of a 10-part video series on Peace Education for elementary (intermediate) level for inclusion into the “Makabayan” curriculum for airing over the Knowledge Channel.

The following deliverables were promised by TEAM-Mindanao to its funder:

1. Raising of the Math, Science and English competencies of at least 50% of its end-users by at least 15% ; and
2. Use of educational television as an instructional tool by at least 85% of teachers in project sites.

## **B. Implementation Phase:**

The selection of 150 public schools from a field of more than 2,000 schools did not seem like too formidable a task until TEAM-MINDANAO got down to do the actual work. Selecting the public school recipients became a huge endeavor; what with having to match an inaccurate school data base with what was on the ground. Though the database said that X number of schools were electrified, the same was not necessarily true upon visiting some schools.

The social preparatory phase included looking for schools which had a consistent source of power, a spare non-instructional room and school officials who

were open to using a technology-based tool of instruction. Because ARMM is the poorest region in the country and is blighted with a lack or absence of basic educational resources, locating schools with a consistent source of power and a room to spare as a Knowledge Channel viewing room was like looking for that proverbial needle in the haystack. Lanao del Sur and Marawi City were eliminated from the recipient list due to their power(less) situation; and TEAM-MINDANAO showered most of its first year's resources on the ARMM province of Maguindanao. The elimination of Marawi City and Lanao del Sur from the list was a difficult and painful decision to make because it was areas like these that needed this type of educational intervention most.

The installation of ETV infrastructure in areas of conflict was a dangerous task at times; and at other times a pleasant endeavor. Installation schedules would occasionally be disrupted due to armed conflicts between families (rido), government forces hunting down wanted fugitives like Abu Sayyaf Group leader Khadafi Janjalani, or the abduction of USAID development workers. For the major part however, rough roads and cruel weather were the hindrances to maintaining and following the schedule TEAM-MINDANAO had set for itself. By the end of 2005, 78 of the targeted 150 schools were using the communications technology-based educational intervention in Maguindanao and North Cotabato . The deliverables were well on their way to getting fulfilled.

The ARMM island provinces of Basilan, Sulu and Tawi Tawi are much worse off than their landlocked sister provinces in terms of the absence of electricity, isolation and the resultant scarcity of books, teachers and other resources needed for sound quality education. Collectively known as BASULTA, these provinces have the lowest human development indicators in the country and are in the bottom rung of achievers as per DepEd's NAT (National Achievement Tests) scores. The desperation of the situation begged for a solution such as TEAM-Mindanao's. It was in BASULTA that TEAM-MINDANAO would find and hurdle its most daunting challenges. But first, TEAM-MINDANAO had to look for a partner who would be willing to provide electrical infrastructure to these unenergised and underserved provinces' island communities. By sheer coincidence, the Alliance for Mindanao Off-Grid Renewable Energy Program or AMORE was looking for social project implementers to partner with.

## **V. The TEAM-Mindanao/AMORE PARTNERSHIP: HAND IN GLOVE**

### **A. Calibrating Energy Demands for ETV**

Operating mainly in Mindanao, the AMORE has concentrated its efforts in electrifying communities in off-grid areas in order to spur development amongst the poorest of the poor in the country. According to its website, “The Alliance for Mindanao Off-grid Renewable Energy (AMORE) Program is a partnership of the U.S. Agency for International Development (USAID), Mirant Philippines Foundation, Inc., the Department of Energy, the Autonomous Region in Muslim Mindanao, and Winrock International that is helping promote peace and progress in Mindanao by sustainable energizing poor, remote, conflict-affected communities that cannot be connected to the power grid, with clean, indigenous, reliable and affordable stand-alone renewable energy systems such as solar and microhydro”.

Its website further elucidates on the mandate of the organization thus: AMORE has been trying to develop a sustainable approach to rural electrification by organizing communities for self-propelled development. While electricity is its entry point, it realizes that its work cannot end with installing the renewable energy systems. Even before it installs the systems, it organizes its community partners into Barangay Renewable Energy and Community Development Associations (BRECDAs) and trains them not only to operate and maintain their renewable energy systems but also to pursue other development projects for their communities.

Utilizing solar panels or photo voltaic systems (PV systems) to electrify public schools for their students to receive the Knowledge Channel was the perfect solution to the problem in BASULTA as it would provide uninterrupted power seven days a week; while the BRECDAs could, in theory, help ensure the safety of the ETV infrastructure. Thus, a partnership was struck between TEAM-MINDANAO and AMORE; and formalized through the signing of a Memorandum of Agreement at formal ceremonies.

AMORE’s electrical engineers set about the task of configuring the amount of electricity required to power the digital satellite receiver and television set for the number of hours specified by TEAM-MINDANAO as ideal for the students to watch ETV regularly. AMORE looked for, found and recommended a television brand

which was the most economical in terms of power usage. The solar panels were then designed accordingly, configured to precise specifications for ETV (300 watt panels with energy demand of 549 watt hours/day) and their construction contracted to suppliers.

## **B. Sustaining the PV and ETV Systems in Island Communities**

The marrying of two technologies did not come without problems. While the ETV infrastructure was projected to last for about 10 – 15 years, and the solar panels for 20 – 25 years, the batteries where solar power was stored in after having been converted to electricity could last for only 2 – 3 years. The project will have been too short-lived if a solution to sustain the PV system were not found. After scanning the environment, a solution was recommended by AMORE to TEAM-MINDANAO: BRECDAs would initiate meetings with the Parent Teacher Community Associations and propose a collection scheme to sustain the PV systems. Each student enrolled would contribute P1.00 or P2.00 a month to a fund; which at the end of three years would be enough to purchase a new set of batteries to power the ETV infrastructure. The problem of sustainability was thereby addressed; and the partners set out to begin the hard work.

The process of choosing communities among AMORE's more than 400 communities to provide ETV infrastructure to was agreed on by analyzing the performance of their BRECDAs. The BRECDAs which had impressive records insofar as paying monthly dues, tariffs and maintaining high balances in their Operations and Maintenance Fund (O and M) were initially selected for profiling by TEAM-MINDANAO.

As a rule, all of AMORE's BRECDAs undergo capacity-building exercises meant to hone leadership skills of its officers and members. Some of its training programs are:

- (i) Participatory Rural Appraisal (PRA) – trains participants to identify/prioritize and rank problems and needs of the people in the community; conduct household survey and household resource inventory; and to identify service providers and agencies serving the community;

(ii) Basic Leadership -- imparts knowledge and transfer skills on leadership to BRECDA Officers; internalization of BRECDA organizational functions; and strengthening of committees and key positions.

(iii) Renewable Energy Operation and Maintenance - includes troubleshooting and repair, and user orientation;

(iv) Basic Financial Management – provides participants with knowledge on simple accounting for Financial Operation of BRECDA Association; provides hands-on guidance on how to use simple ledgers and journal for O & M fund recording.

(v) Basic Entrepreneurship – trains participants to identify business ideas on how to start their own business; the different aspects of a business plan explained ; teach them on how to prepare a simple Business Plan.

(vi) Skills for Income-generating Projects (IGPs) and Enterprises-- equips the community members with skills that can be applied for the improvement of existing livelihood activities or for the establishment of alternative livelihood activities

(vii) Project Proposal Making -- discusses the Income Generating project proposal Format to participants, and teaches them to come up with written persuasive project proposals.

(viii) Participatory BRECDA Assessment Tool (ParBAT) -- enumerates strengthening activities for BRECDA.

Because BRECDA members were usually the leaders of communities, their initiating moves to sustain the PV system for ETV was a surefire formula that would guarantee both systems' lives for at least a decade and a half.

## **VI. REALITY CHECK: August 2006**

Twenty-nine (29) island barangays – 15 in Tawi Tawi, 8 in Basilan and 6 in Sulu passed the litmus test of both TEAM-MINDANAO and AMORE; and were chosen as recipients of the Knowledge Channel under TEAM-Mindanao. Together with the six (6) pilot sites in Maguindanao, a total of 35 ETV systems under TEAM-Mindanao are powered by the photo voltaic systems; again a first in the Philippines.

Mobilizing members of poor island communities to contribute to a fund whose purpose was to sustain an unheard of instructional tool such as educational television was a difficult task. Even more challenging was trying to draw a scenario of the positive effects the intervention would have on their children and on their own lives. The residents of these island communities – the Tausugs', Samas' and

Badjaos' experiences had been confined to fishing and seaweed farming; and technology had, until ETV arrived at their doorsteps, been a stranger to all of them. Scenarios had to be drawn for them: of their children rising out of poverty because of quality education; and of one day years later bringing projects back to their own hometowns. . . of their children one day becoming doctors, engineers and maybe even lawyers because their parents helped sustain ETV in their communities.

Many an eye lit up; and TEAM-Mindanao and AMORE made a go of it.

There have been initial problems at this phase of the project cycle such as starting up the fund, cynicism of some parents, to name a few, but the project implementers are optimistic that this experiment shall succeed.

## **VII. Recommendations**

The project is currently experiencing birth pains; and they will have been lessened if the following were put into place:

1. Prepare the community thoroughly before introducing the educational intervention. It is important for each community member to OWN the project at the outset;
2. Draft the Implementing Guidelines of any MOA or agreement you forge with a partner even if you think you know them;
3. Form a joint monitoring team for the project: renewable energy engineers adept at trouble shooting for ETV; and TEAM-Mindanao project staff adept at PV systems; and
4. Maximize the use of ETV for adult literacy during week-ends and summer months.