

Sacol Island: A Smart Village in Zamboanga City

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Abstract

A Smart Village is a holistic and whole-of-government approach to deliver connectivity and scalable and sustainable services to disadvantaged communities. In the Philippines, Sacol Island in Zamboanga City is the pilot site of the Smart Village Smart Island initiative of the International Telecommunications Union (ITU) adopted by the Department of Information and Communications Technology (DICT) as a platform for inclusive development and digital transformation to enable the accelerated implementation of multiple SDGs in unserved and Geographically Isolated and Disadvantaged Areas (GIDA) through the establishment of accessible and affordable connectivity, enhancement of digital skills, and provision of digital services.

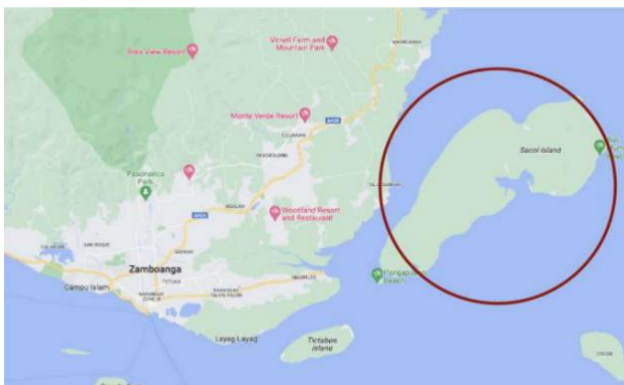
In 2022, the Department of Information and Communications Technology (DICT), through its regional office for Zamboanga Peninsula and BASULTA (DICT R9 BASULTA), successfully connected Sacol Island to the nation and the world, establishing much-needed connectivity in the island community of around 12,000 residents and enabling the entry of digital tools and services.

The endeavour - from hauling unused tower frames from Zamboanga Sibugay to Zamboanga City, erecting the 110-ft tower to capacitating residents with digital and media literacy skills, and leveraging digital tools and services for the community - was achieved through a whole-of-government approach and strong multi-sectoral partnerships, leading to Sacol Island's transformation into a Smart Village.

About Sacol Island

Sacol Island is located five (5) kilometers from mainland Zamboanga City. It is comprised of four (4) barangays or villages, and has a population of around 12,000.

Figure 1. Sacol Island, Zamboanga City



Data source: Google Maps

The main mode of transportation between mainland Zamboanga City and the island is the motorized banca, locally known as the *jungkung*. Around the island,

residents get around using the *habal-habal*, a motorcycle taxi.

Due to its geographical location, the island had minimal to zero established ICT infrastructure. Basic telecommunications services in the locality was a persistent challenge, as cell towers are located in mainland Zamboanga City. This made online classes during the height of the COVID 19 pandemic virtually impossible.

Free Internet Connectivity thru DICT's BroadBand Ng Masa

In line with its commitment to enable digital connectivity in Geographically Isolated and Disadvantaged Areas (GIDA), the DICT identified Sacol Island as a beneficiary of its free wifi project, the Broadband ng Masa (BBM) program, which was launched in the island on October 8, 2022.

Connecting the island was made possible through the strong partnership of DICT and various stakeholders that included Southern Philippines Development Authority, Joint Task Force Zamboanga, Philippine National Police, Philippine Navy, WesMinCom, Philippine Coast Guard, and Sacol Island Barangays that provided transport and security support.

With the power of synergy, DICT and its partners successfully erected a 110-ft Trylon Tower at Landang Laum early September, allowing the DICT Technical Team to successfully establish a backhaul link connecting Sacol Island to the DICT relay station in Barangay Talon-Talon.

Figure 2. Broadband ng Masa launch at Sacol Island with (5th from L) Vice Mayor Josephine Pareja, Mayor John Dalipe, DICT Secretary Ivan John Uy, District 2 Representative and Majority House Leader Manuel Jose Dalipe, DICT Assistant Secretary for Regional Development Maria Teresa Camba, and Southern Philippines Development Authority Administrator Abdulghani ‘Gerry’ Ajul Salapuddin.



Data source: DICT R9 BASULTA

To date, seven (7) areas in Sacol Island are now enjoying internet connectivity established with the Broadband ng Masa program. These sites are the local madrasah, the Landang Laum Elementary School, the Landang Laum Barangay Hall, the Landang Gua Elementary School, the Pangapuyan Elementary School, the Pangapuyan Barangay Hall, and the Tigtabon Barangay Hall.

DICT’s Free Internet Enables Video Conferencing in Sacol Island

First Online Training with Sacol Island residents. Over 100 locals from Sacol Island experienced their first Webinar session through a hybrid training on Information Media and Information Literacy.

Figure 3: Youth participants of the Internet Media and Information Literacy Webinar



Data source: DICT R9 BASULTA

Students, parents, and school staff of Landang Laum Elementary School gathered at a multipurpose hall to engage with trainers from Zamboanga City via live Zoom Conference. Aside from basic digital literacy, the training also focused on Cybersecurity to keep the people of Sacol safe as they navigate the virtual world.

Zoom Call with President Ferdinand R. Marcos, Jr.

On December 24, 2022, Sacol Island residents participated in an online Zoom call for a *kamustahan*, a casual chat and catch-up session, with no less than His Excellency President Ferdinand ‘Bongbong’ R. Marcos Jr.

During the event, President Marcos expressed his desire to test the quality of the internet connection in Sacol Island and other areas that have already benefited from the BBM program.

The online *kamustahan* was also attended by beneficiaries from other GIDA areas in the country, including a school from Pag-asa Island. DICT Secretary Ivan Uy also joined the event and had a *kamustahan* with the program beneficiaries. DICT Undersecretary for Connectivity Angeleo Nuestro, Assistant Secretary for Regional Development Maria Teresa Camba, Assistant Secretary for Connectivity Philip Varilla, and other DICT regional directors were also present during the event.

Figure 4. President Ferdinand R. Marcos Jr. on a Zoom call with Sacol Island residents



Data source: DICT R9 BASULTA

The event served as an excellent opportunity to assess the effectiveness of the program and gather feedback from the beneficiaries.

President Marcos’ surprise online *kamustahan* to Sacol Island for the BBM program highlighted the government’s commitment to bridging the digital divide and providing equal opportunities for Filipinos,

regardless of their location. The BBM program is a crucial initiative to connect GIDA areas to the rest of the country and the world, opening up new opportunities for economic growth, education, and innovation.

The success of this program will undoubtedly have a significant impact on the lives of Filipinos living in these areas, and President Marcos' online *kamustahan* is a clear indication of the government's determination to make it a success.

The International Telecommunications Union's Smart Village Smart Islands Initiative

The International Telecommunications Union's (ITU) Smart Villages project comprises a locally-led, integrated, and holistic approach to providing access to digital services to all citizens of rural communities, with the integration of digital technologies serving as a crucial enabler of equitable, qualitative, and efficient delivery of public services for all.

The smart village platform is a multi-stakeholder, cross sectoral solution that showcases how to cost-effectively accelerate the implementation of the Sustainable Development Goals in remote areas through an integrated development and technology platform model. Through this model, governments can aim at increasing the efficiency, security and effectiveness of public services while reducing their cost, promoting transparency and good governance, enhancing traceability of transactions, and data exchanges, among others.

The Smart Village and Smart Island Initiative has four (4) pillars, namely:

1. Broadband connectivity accessible to remote islands
2. Enhanced affordability
3. Digital skills enhanced
4. Wide range of digital service delivered

Sacol Island as a Smart Village

The unprecedented global COVID-19 pandemic underscored the vital importance of digital networks and services to economic resilience and the continuity of essential public services like education and healthcare. Assistant Secretary for Regional Development Maria Teresa Camba nominated Sacol Island for ITU's Smart Village initiative, which was readily accepted.

To transform Sacol Island into a Smart Village, a line-up of initiatives was scheduled and conducted.

Needs Assessment. To come up with the interventions and activities for the Sacol Island Smart Village transformation, a needs assessment was conducted to identify requirements and challenges particular to its context.

This activity identified gaps between current conditions and desired outcomes, enabling stakeholders to decide where it can contribute that is aligned with their objectives. The result of the needs assessment allowed the DICT to identify the partners needed to work together on the Sacol Island Smart Village initiative.

Figure 5. Sacol Island residents present their needs and priorities during the needs assessments conducted in June 3, 2023



Data source: DICT R9 BASULTA

The needs assessment workshop was held at the covered court of Barangay Landang Laum. The initial results indicated the following as the top priorities of the community:

1. Livelihood particularly on seaweeds farming and fishing;
2. Health facility due to lack of medical professionals in the community;
3. Broadband connectivity due to limited access to telecommunications services.

Stakeholders Orientation for the Smart Village Project. A significant step towards transforming Sacol Island into a Smart Village took place on June 20, 2023, as stakeholders gathered at DICT Zamboanga City Office. The event oriented participants about the Smart Village Project and shared the results of the recently conducted Community Needs Assessment.

The orientation was attended by several representatives from various key organizations and agencies. Among the attendees were officials from the Zamboanga City LGU, Zamboanga City Medical Center (ZCMC), Philippine Coast Guard (PCG), Philippine Navy, Philippine Marines, Joint Task Force Zamboanga (JTFZ), DTI-9, DOLE-9, BFAR-9, PNP-9, DepEd-Zamboanga City

Division, Zamboanga City Water District (ZCWD), as well as representatives from leading telecommunications companies, PLDT and Globe Telecom.

Sacol Island Smart Village Initiative Kick-Off Activity. The Sacol Island Smart Village officially kicked off on June 29, 2023 as the Philippine Pilot of the ITU Smart Village. The kick-off also coincided with the 2023 National ICT Month closing ceremony program.

Figure 6: Sacol Island Smart Village Initiative kick-off with partners and stakeholders on June 29, 2023



Data source: DICT R9 BASULTA

Among those present for the kick-off were Zamboanga City LGU Mayor John Dalipe, TESDA IX, PLDT, NICP Vice Pres. Michael Lim, DepEd Zamboanga City supervisors, Naval Forces for Western Mindanao, Joint Task Force Zamboanga, Southern Philippines Development Authority, Western Mindanao State University, DOLE IX, and PTV.

Tablets were also donated to four (4) elementary schools in Sacol Island particularly Landang Laum Elementary School, Landang Gua Elementary School, Busay Elementary School and Pasmanta Elementary School.

Ground-breaking of DITO Tower. On December 5, 2023, DITO Telecommunications, a key stakeholder in the Smart Village Initiative, marked a significant milestone by breaking ground for infrastructure aimed at enhancing communication both within and beyond the community.

Representatives from DICT IX, BTC, NTC IX, and DITO Executives came together to mark the ground-breaking ceremony

As of January of 2024, the construction of the telecommunications tower is well underway. This initiative will greatly benefit the community by offering affordable telecommunications services, empowering residents to engage actively in the global economy and access opportunities previously beyond their reach.

Figure 7. Construction of DITO Telecommunications Tower as of January 2024



Data source: Ustadz Idris Ijam

Telemedicine Launching. Telemedicine stands out as a crucial service aimed at addressing one of the primary needs identified within the community of Sacol Island during the comprehensive needs assessment. This aims to improve the healthcare services provided to the residents of Sacol Island.

Figure 8: Telemedicine launch in Sacol Island



Data source: DICT R9 BASULTA

Huawei Philippines and mWell donated an mWell on-the-go bag for the Sacol Island Community to roll out the mWell online integrated health and wellness platform. The platform provides health services like Teleconsultation, Reading of Lab Results, Prescription of Medicine, and Diagnosis to augment the Health Services provided to the people of Sacol Island.

Telemedicine Impact. Zamboanga City Health Worker, Ms Sharina Mae Montenegro shared the advantages of telemedicine.

“Paano po siya nakakatulong po yun teleconsultation dito sa island, first po yung mga patient di kailangan pumunta sa doctor dun sa bayan para mag consultation, nakapagpa consult na sila kahit sa online consultation, isa din sa advantage po is para sa pagbayad nila ng pamasaha at sa doctor magagamit na nila pambayad sa pagbili nila ng mga gamot na narereseta sa kanila ng mga doctor.”

[How does teleconsultation help us on the island? Firstly, the patients no longer need to go to the main island to go to a doctor for a consultation, they can now consult through online, another advantage is that the money they would spend for the transportation fare and doctor's fee can instead now be used to buy the medicine that the doctor prescribed.]

Showcasing Sacol Island Smart Village to the World

Assistant Secretary for Regional Development Maria Teresa M. Camba highlighted Sacol Island's journey towards becoming a Smart Village at the Smart Islands Initiative Regional Consultative Workshop in Jakarta, Indonesia last December 12, 2023.

Figure 9: Asec. Tess Camba presents the Sacol Island journey to ICT leaders and stakeholders in the Smart Islands Initiative Regional Consultative Workshop in Jakarta, Indonesia



Data Source: DICT R9BST

Reaffirming DICT's support and commitment to the initiative, DICT Secretary Ivan John E. Uy presented the Sacol Island Smart Village report to International Telecommunications Union Secretary General Doreen Bogdan-Martin at the 4th ASEAN Digital Ministers Meeting in Singapore.

Figure 10: DICT Secretary Ivan John Uy, accompanied by Undersecretary Jocelle Batapa-Sigue, turns over the project briefier and report on the Sacol Island Smart Village initiative to ITU Secretary General Doreen Bogdan-Martin during the 4th ASEAN Digital Ministers Meeting held February 1-2, 2024 in Singapore.



Data Source: DICT R9 BASULTA

Policy Recommendations / Conclusions

As Sacol Island progresses towards the realization of its Smart Village and Smart Island vision, anticipation builds for the upcoming implementation activities scheduled for 2024. After the 4th ASEAN Digital Ministers Meeting in Singapore, DICT Secretary Ivan John Uy directed all DICT Regional Offices to replicate the SVSI initiative nationwide.

With the collective efforts of stakeholders and partners, and bolstered by the strong institutional support demonstrated by the DICT, the journey towards a technologically advanced and sustainable community is well underway. Together, we are shaping the future of Sacol Island and paving the way for a brighter, smarter tomorrow.

Acknowledgments

My sincerest appreciation and gratitude to DICT, the DICT R9 BASULTA team, and the partners of the Sacol Island Smart Village project for their steadfast support, dedication, and commitment to the cause of digital transformation and inclusive development. I also extend my deepest gratitude to the people of Sacol Island – for welcoming the initiative and for embracing ICT.