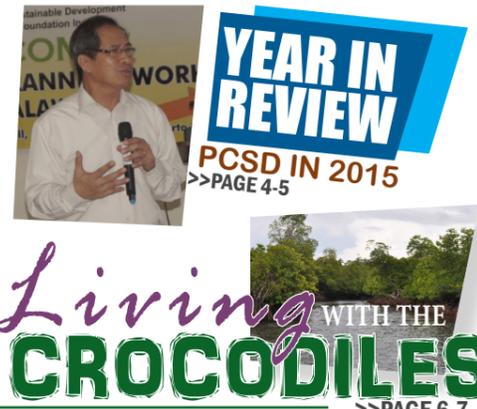


# PCSD updates



## TO MAINSTREAM SUSTAINABLE DEVELOPMENT ADVOCACY IN PALAWAN Stakeholders craft 5-year COMMPLAN



A total of 48 individuals from different sectors registered for the Communication Planning Workshop for Palawan held at PSDTI Training Hall, RVMCSD, Bgy. Irawan, Puerto Princesa City.

**TO POPULARIZE the sustainable development (SD) advocacy in the province, a Communication Planning Workshop for Palawan was conducted on January 26-27 at the Palawan Sustainable Development Training Institute (PSDTI) in Bgy Irawan, Puerto Princesa City.**

As the R.A. 7611 or the Strategic Environmental Plan for Palawan Act puts it, sustainable development is “the improvement in the quality of life of the present and future generations through the complementation of development and environmental protection activities.”

Nelson P. Devanadera, Executive Director of the Palawan Council for Sustainable Development Staff (PCSDS), in his opening remarks, said the challenge that the stakeholders face in implementing and interpreting the SEP Act of 1992 is on “how to harmonize development and conservation.”

“We need to communicate everything to all stakeholders; if not, then the threats will be there,” Devanadera said before the 48 participants coming from different sectors, such as the local government units (LGUs), national government agencies (NGAs), non-government organizations (NGOs) and local news media.

Being the only province with such environmental framework plan in the Philippines simply speaks of Palawan’s uniqueness that needs to be protected from human-induced threats, says Devanadera.

However, he cautioned that as the province’s poverty incidence remains at 60%, it makes Palawan’s fragile environment even more susceptible to disturbance, if not total destruction.

“Our natural resources is the only source of livelihood for our people, so that means the pressure would always be on it,” he said, adding that the province has continued to reel in from biodiversity loss due to destructive human activities like wildlife poaching, illegal logging and slash-and-burn farming.

To destroy the environment and natural resources, Devanadera said, would be tantamount to halting progress in Palawan. “So development is always dependent on the natural resources,” he concluded.

### SUPPORT MECHANISM

To usher the people in translating environmental awareness to action, the SEP Law has provided a provision for the implementation of the Environmental

Education and Extension (EEE) program as one of its support mechanism.

“It is along this line that the SEP Communication framework is anchored. It goes beyond just informing people about sustainable development, but it needs to get the audience to participate and become advocates of sustainable development,” said Alex Marcaida, former chief of ECAN Education and Extension Division.

Section 15 of the RA 7611 practically directs the formulation of a comprehensive environmental information drive program to prime-up awareness regarding PCSD policies, programs and projects on various environmental concerns intended to various audiences.

It also includes a guide designed towards increasing capability, such as capability building programs for partners and various stakeholders, and improving institutional partnerships, coupled with appropriate extension services to wean people away from destructive practices.

In line with this, the representatives of the participating agencies and organizations crafted their respective five-year communication plan where they systematically laid out information, education and communication (IEC) strategies to effectively impart the concept of Palawan’s SD to their target audience. Covering the period from years 2015 to 2020, the plan is designed to be implemented in three stages, accordingly: 1st wave (awareness stage), 2015-2016; 2nd wave (appreciation and start of action level), 2017-2018); and 3rd wave (action towards community leading advocacies), 2019-2020.

The workshop output, meanwhile, was compiled into one comprehensive SEP COMMPLAN, which will be up for the Council’s adoption.

### UNIFYING SD’s DEFINITION

Marcaida said the two-day workshop, in cooperation with the Pilipinas Shell Foundation Inc, also aimed at creating a common definition of SD among stakeholders, so as to address the burning environmental issues hounding Palawan.

He took notice that while the 1991 Rio de Janeiro Summit provided a clear definition of SD that the SEP likewise adopted, its functional or operational definition on the ground has yet to be harmonized.

Thus, “there is still a great confusion and, maybe, debate on how to operationalize the definition in the

COMMPLAN>>PAGE 2

## PCSDS gears up for SEP’s Silver Anniversary

THE PALAWAN COUNCIL for Sustainable Development Staff (PCSDS), the implementing arm of the multi-sectoral and interdisciplinary body PCSD, is preparing for the celebration of the silver anniversary of RA 7611 or the Strategic Environmental Plan (SEP) for Palawan Act of 1992 on June 19, 2017.

In connection, a resolution directing the creation of the organizing committee for the SEP anniversary was approved by the Council during its 222nd Regular Meeting on January 28.

“The Organizing Committee shall formulate, propose, direct and recommend plans, programs and policies to facilitate the preparation in collaboration with all related agencies, associations, organizations and individuals in celebrating the 25th SEP Anniversary to highlight the importance, implications, contributions and achievements of the SEP Law to the people and the community,” states its explanatory note.

This committee will be headed by PCSDS Executive Director Nelson P. Devanadera as the ex-officio chairman, while the vice chairman is to be elected from among the committee members. The members, on the other hand, will be composed of the following: one representative from each of the Council member agencies, one representative from each ECAN Board, representatives from the academe, and a representative from other entities that may be identified by the committee.

Atty Adelina Villena, PCSDS Director for Operations, further proposed during the Council meeting to hold the celebration of the 25th SEP Anniversary year round. “That means we will start celebrating by January 2017, so every month we will have specific activities,” says Villena, admitting “it requires a lot of organizing.”

As to the resource requirements, she explained that “it is not only the PCSD that will shoulder the expenses” because the member agencies “can also do their share.”

For instance, she said, at the municipal level, the ECAN Boards can design and host its own activity using its own resources.

## Palawan LGUs enjoined to promote conservation through flagship species

**THE LOCAL government units (LGUs) in Palawan are enjoined to identify flagship species that shall serve as emblem of conservation in its respective localities.**

Pursuant to Section 35 of RA 9147 or the Wildlife Resources and Conservation and Protection Act of 2001 which commits the LGUs to "initiate conservation measures for endemic species in their areas," the Palawan Council Sustainable Development Staff (PCSDS) proposed a resolution entitled "The Guidelines on the Selection and Management of Flagship Species by the Local Government Units."

The said resolution was included in the agenda of the 222nd PCSD Regular Meeting on January 28. But the Council has deferred it for further review.

PCSD is a multi-sectoral and intergovernmental agency created through RA 7611 or the Strategic Environment Plan for Palawan Act. It is mandated to provide comprehensive framework for the sustainable development of Palawan compatible with protecting and enhancing the natural resources and endangered environment of the province.

In connection, the guidelines aimed at assisting the LGUs in its "selection, adoption and management of flagship species that would ensure flagships functionality in order to attain conservation goals in a long term basis."

"With the naming of flagship species in a certain locality, the LGU and community can create programs and projects that would help raise awareness on why we need to protect and conserve those endemic species and its habitats," said Levita A. Lagrada, head of the Permitting Unit at the ECAN Regulation and Enforcement Division (ERED).

Lagrada, who drafted the said guidelines, noted that the provisions will be applied to all Philippine and Palawan endemic terrestrial and aquatic wildlife species found in the province.

### 'PRIDE OF PLACE'

Endemic species and rare species of wild plants and animals candidate for flagship species should foster a sense of pride in the local environment,

according to the guidelines.

"Pride of place is a powerful emotion that can motivate people to change their behaviors and empower them to take environmental action," it explained.

For instance, Lagrada furthered, Puerto Princesa City integrated Palawan peacock in its official logo, while Narra town bannered itself as the "Philippine Cockatoo Capital of the World" with Rasa Island Wildlife Sanctuary as the critically-endangered Philippine Cockatoo's (locally known as Katala/Agay) safe refuge.

"Puerto Princesa has its Tandikan Festival, while Narra has its Katala Day," she mentioned, adding that such activities encourage the public to support, and create sense of ownership in, the management programs and other related activities being implemented for the said species.

For this purpose, the flagship species should be "charismatic or appealing, and "have no negative perceptions among local people such as being crop pest, being dangerous, or have existing cultural connotations that detract from or compete with the campaign's conservation messages."

### SELECTION PROCESS

Based on endemism, combined with any of the provided criteria, the LGU should submit, through a resolution, a list of candidates for its flagship species to PCSD on or before July 2016.

Three or more species shall be nominated in order of priority; however, if the first choice is already declared as flagship species of another LGU, the PCSD shall approve the second priority.

To assist them in the selection process, LGUs will be provided with "a list of endemic species and their profile that can be found in each municipality based on the best scientific information available."

But "they may also opt to conduct biodiversity assessment, rapid assessment or interview with the community in order to identify wildlife species found within their political jurisdiction."

*Details & more @ [www.pcsd.gov.ph](http://www.pcsd.gov.ph)*

## 222<sup>ND</sup> PCSD REGULAR MEETING

*newsbits.newsbits*

Governor's Conference Room  
2nd Floor, Provincial Capitol Bldg Puerto Princesa City  
January 28, 2016

### WHEN TO REMOVE CROCODILES FROM THE WILD?

Dr. Terry Aquino, Biodiversity Management Bureau consultant of the Department of Environment and Natural Resources (DENR-BMB), sat down with environmental authorities in Palawan and drafted a "Criteria for Removing Crocodiles from the Wild" during a consultative meeting on crocodile conservation last August 8, 2014.

Conditions, which are all strictly needed to be met before plucking a crocodile out from the wild, are as follows: (1) Confirmed report of human-crocodile conflict; (2) Size of the male crocodile – equal or greater than 10 ft.; (3) Proximity to barangay proper during attack – within 1 kilometer from the barangay center; (4) Size of quality habitat – more than 10 km length of river, and (5) Breeding season – attacks should occur outside of breeding, incubation and laying seasons.

Aquino presented these guidelines during the Council meeting. She clarified that the guidelines is intended only as operational guidelines for government agencies and not for the public.

But the Council decided to disapprove the resolution entitled, "Policy recommendation on the removal of crocodiles from the wild."

DENR Usec. Manuel D. Gerochi opined, "If you approve this as a PCSD criteria, then even I, a private person, can use this as an instrument to take out and kill [any] crocodile I see as long as it meets the criteria; that might negate the intention of the Wildlife Act."

He suggested to develop instead a program under the RA 9147 Wildlife Act to implement the said guidelines.

### PALAWAN MAN AND BIOSPHERE RESERVE'S PROPOSED OFFICIAL LOGO

The Palawan Man and Biosphere (MAB) Reserve proposed official logo, which won at the logo-making contest during the 23rd SEP Anniversary celebration last June 2015, is now up for the Council's adoption.

The MAB Reserve Programme of United Nations Educational, Scientific and Cultural Organization (UNESCO) was established in 1971 as an intergovernmental research program to promote better understanding and knowledge of the interactions between people and their environment.

On March 27, 1990, the UNESCO in Paris, France declared Palawan as such because of its potential to showcase the co-existence of sustainable development and protection of the environment.

Meanwhile, it is this balance between man and nature that the logo aptly represents. It contains an image of man shadowed by a tree, the sea and the map of Palawan, featuring four color palattes: green, light blue, navy blue and orange.

Once adopted, it will be used as branding of Palawan's MAB Reserve.



### PROJECTS ISSUED WITH SEP CLEARANCE, PAB REPORT TO THE COUNCIL

The PCSDS Executive Director issued SEP Clearances for 10 non-critical projects (covering 4 commercial sand and gravel projects, 1 gasoline refilling station and the rest are tourism establishments) in December 2015, and another 16 clearances (covering 6 commercial sand and gravel projects, 2 gasoline refilling stations and the rest are tourism establishments) in January 2016.

The PCSD Adjudication Board (PAB) had its meeting on December 7, 2015, wherein it resolved eight (8) administrative cases and received one (1) pleading for resolution.

No Category A projects for approval of the Council were received as of the 222nd PCSD Regular Council Meeting.

## Stakeholders craft 5-year COMMPLAN

<<FROM PAGE 1



Alex Marcaida, PCSDS District Manager – DMO North, explained during the workshop that the key to make every Palaweno an advocate for sustainable development is through crafting an effective communication framework that convinces the mind, heart and hands of the people to translate environmental awareness to action.



MARCAIDA

context of resource uses," he argued.

"We're not saying that people doesn't know what the definition [of SD] is, but it's (comm plan workshop) really more of unifying, at the same time, synchronizing [their perceived definitions and comm plans] because we all know that everyone has roles," said Marcaida, who now heads the PCSDS District Management Office North (PCSDS-DMO North).

### VARYING VIEWS

Based on the 2014 PCSDS survey on Knowledge, Attitude, Skills and Practices (KASP) of stakeholders regarding SD, it appears that there remains a varying degree of people's definition about the said concept, Marcaida observed.

For example, he mentioned, the NGOs, have taken the "extreme side of environmental protection over an unsure development, leaning too much

on the precautionary principle in taking decisions."

Business sector, on the other, is "belligerent."

On the other hand, communities, who are directly using the resources, have their different view, which is still dictated by their needs and present condition.

While, politicians would think that SD is a critical decision of providing basic infrastructure services that can sustain the lives of their constituents.

"But as time passes, development activities have become more impacting to the environment, [thus] threatening biodiversity," he observed. "The move is more of tilting the decision towards economic gains rather than blending it with environmental protection."

"Defining sustainable development operatively is, therefore, a necessity," he stressed.



**POTENTIAL ECO-TOURISM SPOT.** Hundred Caves' surrounding area can carry soft impact eco-tourism activities such as guided educational cave tour, cave photography, birdwatching, rock climbing, and as well as scientific studies.

## Puerto Princesa's Hundred Caves as eco-tourism site

### HOW CAN this city of natural wonders conserve its Hundred Caves? The answer is simple and clear: Develop it for eco-tourism.

A five-year management plan for the protection and conservation of Hundred Caves, a potential eco-tourism site in Barangay Tagabinet, Puerto Princesa City is now up for approval and adoption of the Palawan Council for Sustainable Development (PCSD).

PCSD is a multi-sectoral and intergovernmental agency created through RA 7611 or the Strategic Environment Plan for Palawan Act of 1992.

The 2016-2020 cave management plan was developed and prepared by the PCSD Staff in coordination with the City Tourism Office, Puerto Princesa Subterranean River National Park-Project Management Office (PPSRNP-PMO), Centre for Sustainability, Barangay Council of Tagabinet and other concerned stakeholders.

This is pursuant to PCSD's mandate to implement R.A. 9072 or the National Caves and Cave Resources Management and Protection

Act of 2001, which directs the State to "conserve, protect and manage caves and cave resources as part of the country's natural wealth."

In Palawan, there were 94 caves identified from 2008 to 2014.

Meanwhile, the presentation of Hundred Caves' management plan was included on the agenda of the 222nd PCSD Regular Meeting on January 28, but the Council has deferred it for further review.

Once adopted and implemented, it will prompt the local stakeholders to undertake necessary protection and conservation measures for the cave ecosystem and its surrounding environment.



**Hundred Caves' main opening.**

### PERFECT FOR ECO-TOURISM

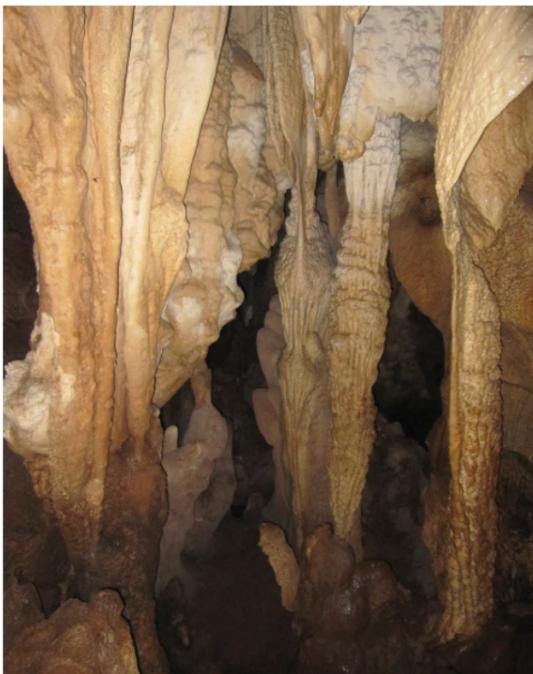
It will also serve as a guide in developing tourism-related capacities of the community, which, in turn, will provide alternative livelihood and generate income for the locals.

By historical account, Hundred Caves of Tagabinet was discovered during the 1990s by Bueg Lais, a member of Palaw'an indigenous tribe in search for caves in Tagabinet karst areas that possesses edible birds' nest (EBN).

It is a solution-type of cave having an elevation of 80 meters (cave mouth) above sea level.

"This cave system is multi-stored and possesses a series of continuous narrow "maze-like" and/or winding interconnecting passages and vertical pitches which are both challenging and beautiful," described the management plan's executive summary.

Given its characteristic, Hundred Caves was classified as Class 3. As such, its surrounding area can carry soft impact eco-tourism activities such as guided educational cave tour, cave photography, birdwatching, rock climbing, as well as scientific studies.



**Magnificent cave columns and shawls inside the Hundred Caves.**

This "Green Tourism" program for the Hundred Caves, which is anchored on the concept of community-based sustainable tourism (CBST), will also capacitate the Tagabinet Neighborhood Tourism Association (TNTA).

As in the experience of other CBSTs in Puerto Princesa, the said program is proven to address both the issues on environmental conservation and socio-economic improvement of the local communities concerned.

But Tagabinet also has to consider various elements that the program entails, including the visitation management, tourism infrastructure development, establishment of an equitable income sharing and user's fee system, and accreditation of tourism establishments, among others.

Once operational, it will serve as an additional tourist destination, along side the City Tour, the Puerto Princesa Underground River (PPUR) and island hopping in Honda Bay.

### ADDRESSING THREATS

Hundred Caves, however, has its fair share of issues and concerns that threaten its ecological integrity.

As noted by the management plan's executive summary, among those are "the uncontrolled tourism and exploration activities, and uncontrolled edible birds nest collection which resulted to presence of cave hazards, destruction of rock formations, and the presence of vandals and graffiti's along the walls and flooring of the cave system."

"Reports of lack of governance and enforcement implementation as well as lack of human resources also pose threat to Hundred Caves," it added.

Through participatory planning and validation workshops, interventions seen to address such threats were identified as follows: (1) entrance in the cave has to be regulated to cushion the impact of "mass tourism"; (2) delineating a buffer zone around the Hundred Caves as well as development of other activities outside the cave can minimize the existing and potential adverse effects of



**The PCSDS Cave Assessment Team conducted participatory planning and validation workshops with the stakeholders in Bgy Tagabinet, Puerto Princesa City.**

# PCSD updates

## YEAR IN REVIEW

### PCSD'S ACHIEVEMENTS IN 2015

Year 2015 has come and gone and the Palawan Council for Sustainable Development (PCSD) has undeniably made the most of it! Last year was definitely a success as the PCSD Staff managed to review the impacts of R.A 7611 or the Strategic Environmental Plan (SEP) for Palawan Act. Numerous remarkable achievements were also recorded in the implementation of sustainable development policy and regulation services. The PCSDS also conducted workshops and fora related to the protection of Palawan's exquisitely unique and fragile environment. And here's a run-down of what the PCSDS had accomplished.



#### SEP Implementation Reviewed

SEP LAW has not been reviewed since its enactment in June 1992, and not until it marked its 23rd anniversary in 2015, with the facilitation of the SEP Implementation Review Workshop on May 6-7.

Based on the outputs from the Roundtable Discussions (RTD) conducted, the stakeholders' perception of PCSD and the SEP remains positive in spite of the issues it currently faces.

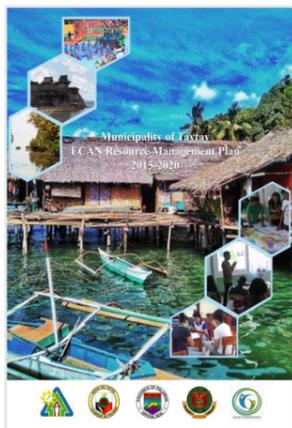
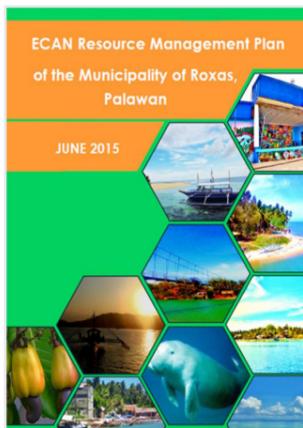
But there were also negative observations identified during the workshop, such as: (1) PCSD's "highly-politicized decision-making process"; (2) its "slow and efficient" clearance and permitting system; (3) its perceived "too much power, mandate and functions"; (4) its

"missed opportunity to play an 'integrative' and 'facilitative' role in empowering local governments and communities"; and (5) its perceived failure to effectively communicate the law's goals and values to the different sectors and communities.

Most of the participants have observed that these factors have adversely affected the SD framework of the province's development, the pace of its implementation at local government level, and the faith of the people on the Council, consequently on its staff and on the core philosophy it promotes.

Nonetheless, an assessment such as this is a welcomed development inasmuch as an avenue for the stakeholders to evaluate the institution's hits and misses throughout the course of its operation, will always redound to its benefit.

#### Integration of ECAN into the CLUPs



AS PART of the PCSD's mandate to mainstream Environmentally Critical Areas Network (ECAN), its Staff has been assisting the LGUs in Palawan in incorporating the ECAN into the latter's respective Comprehensive Land Use Plans (CLUPs). Of the 23 towns in Palawan, the municipality of San Vicente was the first to complete its CLUP.

And with the expansion of development undertakings across the province, there is indeed a dire need to fast-track the integration of ECAN into the other LGUs CLUP. Thus, in 2015, the northern towns of El Nido, Taytay and Roxas were selected to continue the integration, through the respective ECAN Resource Management Plan (ERMPs) developed for each of the

municipality. These plans were formulated in coordination with the local government units and assistance of interns from the University of the Philippines Los Baños – College of Human and Ecology.

This integration aims to ensure the conformity of all local development plans and projects with the SEP framework, in compliance to the mandate of the SEP Law compelling both local and national government agencies in Palawan to realign their policies, projects and programs to the realization of SEP's goals and objectives.

Related to this, a guidebook entitled "Mainstreaming Environmentally Critical Areas Network (ECAN) in the Local Land Use Planning System: Framework and Methods" was drafted to walk through the ECAN Board members and LGU officials on the process of ECAN mainstreaming.

5,937 permits & clearances issued  
 23 SEP Law's years of existence  
**PCSD BY THE NUMBERS**  
 65 legal cases filed  
 4,499 inspections of wildlife conducted

#### NEWVISION

Palawan, an innovative and dynamic global center of sustainable development

#### NEWMISSION

PCSDS as the driver of environmental conservation and inclusive development in Palawan, a biosphere reserve and science-for-sustainability site, guided by the Strategic Environmental Plan

#### Caves Act Implementation

CAVES ARE NOT JUST CAVES. They are more than just magnificent stalagmites and stalactites and bats! As you may know, caves are an integral part of our ecosystem as they serve as habitat of unique, rare, endangered and even unknown species of plants and animals.

Think about paleontological values and you may have caves in mind. Considered as culturally, archaeologically, historically and spiritually significant areas, caves contain fossils such as the preserved remains of prehistoric people, plants and animals that tell us nearly all we know about the history of life on Earth.

As the leading agency tasked to implement the Caves Act of 2001 in Palawan, the PCSD has since spearheaded the management, protection and conservation of caves in the province.

Towards this end, it undertakes what is referred to as classification. This is the process of assessing and determining appropriate sustainable use of caves with due consideration to biodiversity, archaeological, historical, cultural and potential socioeconomic values.

Of the 94 identified caves in Palawan, 23 are already classified as of 2015 by the PCSDS Cave Assessment Team. Of these, a total of 15 caves found in the towns of Cuyo, Cagayancillo, Taytay, Quezon, Bataraza and City of Puerto Princesa are classified as Class 3, while a total of eight caves located in Busuanga, Cagayancillo, Taytay, Rizal, Bataraza and Puerto Princesa are classified as Class 2.

This process is thoroughly outlined in PCSD Administrative Order No. 03-08 Implementing PCSD Resolution No. 03-217, Adopting and Revising the DENR Rules and Regulations of the National Caves and Cave Resources Management and Protection Act as Applicable in the Province of Palawan, and PCSD Manual on Cave Classification.

#### CAVE CLASSIFICATION

**Class I.** Caves with delicate and fragile geological formations, threatened species, archaeological and paleontological values, and extremely hazardous conditions. Allowable use may include mapping, photography, educational and scientific purposes.

**Class II.** Caves with areas or portions which have sections that have hazardous conditions and contain sensitive geological, archaeological, cultural, historical and biological values or high quality ecosystem. It may be necessary to close sections of these caves seasonally or permanently. It is shall be opened to experienced cavers or guided educational tours/visits.

**Class III.** Caves generally safe to inexperienced visitors with no known threatened species and archaeological, geological, natural history, cultural and historical values. The caves may also be utilized for economic purposes such as guano extraction and edible birds' nest collection.

SOURCE: PCSD Manual on Cave Classification



# Living WITH THE CROCODILES



**BALABAC, PALAWAN** – In coastal communities in Balabac, an island town in the southern tip of Palawan – Indo-pacific crocodiles or commonly called Salties are “king.” They make locals tremble in fear. When doing recreational swimming or fishing along the river or sea, everybody remains vigilant as, anytime, this creature may relentlessly consider them as prey. With the considerable number of reported crocodile sightings received recently by the Palawan Council for Sustainable Development Staff (PCSDS), the office sent out Levita Lagrada of the ECAN Regulation and Enforcement Division (ERED) and Rhoda Roque, Manager of District Management Office-South (DMO-South) to conduct a series of information, education and communication (IEC) campaigns in select areas in the municipalities of Balabac, Bataraza and Brooke’s Point on January 21-30. They were accompanied by this writer of the ECAN Education and Extension Division (EEED) and a representative from Palawan Wildlife Rescue and Conservation Center (PWRCC), Eric Evio.

**MUSLIM AND BALABAC’S** indigenous group, Molbog, who predominantly populate this island town, revere the crocodiles. They call them “upò” or ancestors, believed to guard the rivers and sea, and bless the fisher folk with abundant catch.

But 60-year-old Molbog, Teodoro Basinting, no longer thinks that they should have to hold true to this belief anymore. The crocodiles, his forefathers told to be respected, had attacked three of his kin.

“Sa totoo lang, sa nangyaring ganyan parang di ko na rin sila matawag na upò dahil masakit din ‘yung ginawa niyang perwisyo sa aking mga kamag-anak,” he lamented.

Two years ago, Basinting shared, his cousin was fatally attacked by their upò. Just last year, his another cousin Kerim Baldosa, 35 and nephew Jason Flores, 27 fell into separate attacks but they managed to retaliate and survive.

It was around 5 p.m. of Tuesday, November 15, 2015 when Baldosa encountered a three-meter Indo-pacific crocodile while on way home. He was rowing his fishing boat going to Sitio Caritan, Bgy Catagupan, after having sold his catch at the nearby Sitio Agu.

As you may know, sitios and barangays in this town inhabited by “Salties”, may it be inland or island, are more accessible and affordable

**Most of the fisherfolk in Balabac built their house up on the shallow part of the sea or at the seashore.**



via water transport vessels rather than tricycles or motorcycles (locally known as “habal-habal”). This as many of the provincial roads remained unpaved, if not already opened.

While Baldosa knew his town is infamous for crocodile attacks, he never expected it was that very moment his own narrative will unfold. “Pagdating ko sa tandol, kati na. Hanggang tuhod ang tubig. Habang sumasagwan ako, may narinig ako,” he vividly recounted.

And his suspicion was true. “Parang may sumusunod. Akala ko bangka rin. Paglingon ko nakita ko yung buntot. Hinabol niya talaga ako. Sumagwan ako nang mabilis hanggang sa inabutan na ako.”

Propelled by his adrenaline, Baldosa gathered all the energies he had, telling himself it wasn’t the time to be coward. What will his four children’s future be should he give into the crocodile’s might? His mind said he should brave the situation. He must live.

“Pagkagat niya sa likod ko nalaglag ako sa bangka. Inabot ko yung mata niya, saka binira ko. Bumitaw. Pero sinunggaban ako ulit. Tinusok ko ulit yung mata. Binalikan niya ulit ako pangatlo at pang-apat na beses,” he narrated.

It was a power struggle between man and animal. A skinny Baldosa, standing five feet, did not let fear grapple him. He continued the tug-of-war. The determined crocodile threw him down two meters away from his outriggered paddle boat.

Gasping, he managed to reach his bolo and forcefully struck the crocodile’s nape, just inches away from its piercing eyes, pushing the disoriented creature to flee the scene.

Meanwhile, Flores, a father of three, thought he was safe within his own parameter. Just like his neighbors, who depend on sustenance fishing for a living in Sitio Purisan, Bgy Catagupan, his small nipa hut stood on the shallow part of the sea.

At around 8 a.m. of December 8, 2015, he dived into the water just under his house. To his surprise, a three-meter long saltwater crocodile defensively attacked him from behind. Mr. Flores suffered puncture wounds at the back part of his head and right check.

**CITING STUDIES AND REPORTS,** Lagrada, a zoologist by education, said that the sightings



**CROC ATTACK SURVIVOR:**  
(1) Kerim Baldosa, 35; (2) Jason Flores, 27; and (3) Norhata Diacon, 38



in Balabac came as no surprise because it is observed to be highly concentrated in there.

“Sa buong Pilipinas, ang mataas na concentration ng population ng crocodiles ay dito sa southern tip ng Palawan kaya di nakapagtataka na dito lagi ang mga insidente ng pag-atake,” says Lagrada at the Balabac’s ECAN Board meeting.

In the Philippines, aside from Palawan, its population remains in only a few scattered locations in Mindanao, particularly in the periphery of Ligawasan Marsh, Panguil Bay, Zamboanga Sibugay, Tawi-Tawi and Del Carmen in Siargao Island. It is also reported in three rivers in the eastern foothill of the Northern Sierra Madre National Park in Isabela province.

Lagrada, who worked for years at the PWRCC, said that the Indo-pacific crocodile or estuarine crocodile is normally found in coastal waters, estuarine rivers and freshwater habitats such as lakes, rivers and creeks. It is known to occasionally venture into marine habitats and intertidal coastal areas when they are moving between coastal rivers.

In fact, when our group was crossing the river in Bgy Catagupan heading to sitios identified for IECs, we spotted a two-meter long crocodile basking in mangroves knee-roots. Imagine the fear that engulfed us knowing it was just a stone throw from the motorized boat we’re riding.

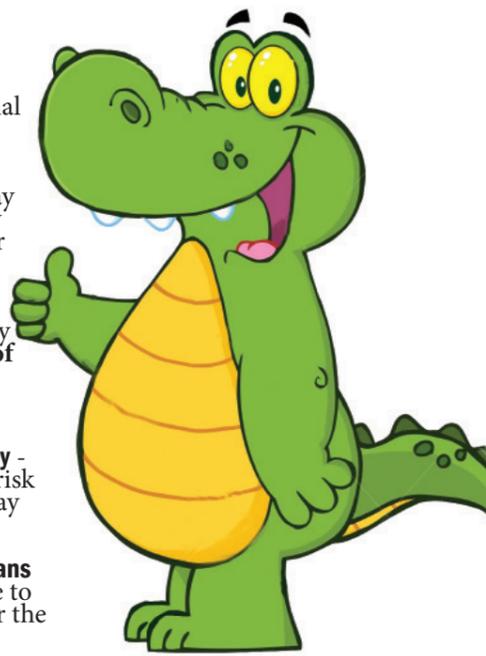
The fact that majority of the people in Balabac are living in coastal areas makes them even more vulnerable to crocodile attacks.

Norhata Diacon, 38, lives beside the river at Sitio Dawi-Dawi, Bgy Melville. They used to defecate on the river, but not anymore when a nearly two-meter saltwater crocodile snagged her left hip while defecating at 3 p.m., sometime in July 2015.

Diacon, who managed to survive the attack, said never again did she defecate on the river since the incident happened.

Another non-fatal attack happened to Jason Sahel, 28, of Bgy Indalawan, another coastal barangay in Balabac. Because of the incident, he promised himself four years ago to never go fishing again. At 8 p.m. sometime in June 2012, it was low tide when he and his

# SAFETY CONSIDERATIONS



**Crocodilians are most active by night, but can also hunt by day** - although all crocodilian species are primarily nocturnal (ie. active at night) that does not mean that they will be asleep during the day. In fact all species can be active by day or night, sleeping only briefly and waking easily with minor disturbance.

However, greater vigilance is necessary at night particularly during the **warmer months of the year** when activity levels are highest.

**Crocodilians prefer smaller prey** - children are at much greater risk than adults, so keep them away from the water.

**Do not approach wild crocodilians too closely** - the closer you are to a wild crocodilian, the greater the risk of being attacked.

**Be wary during the breeding and nesting season** - adult crocodilians of both sexes become more active and aggressive during the breeding season, so there is more reason than usual to stay away from them.

**Never approach a wild crocodilian nest** - adult females can aggressively defend their nest if you get too close (within 10 m) and there is a much greater risk of being attacked. Defensive females will often pursue potential threats more aggressively than normal.

**Never interfere with baby crocodilians** - juvenile crocodilians readily produce distress calls if they are disturbed, and nearby adult crocodilians will typically respond very aggressively to any potential threat.

**Be responsible about cleaning fish and discarding scraps** - never clean fish in areas where people are active, such as boat ramps or the water's edge. Fish scraps attract crocodilians, and doing this where people are found is irresponsible and dangerous.

SOURCE: Levita A. Lagrada, PCSDS-ERED

also the ones to validate reports of crocodile attacks and remove the involved crocodile from the wild should it meet the prescribed criteria.

In the long run, Lagrada said this problem will not be mitigated without the LGUs initiative to provide its constituents with alternative livelihood, which, in one way or another, will veer them away from destructing or encroaching the mangrove forests that harbor the crocodiles. Other LGUs can also put up warning signs in areas known to be crocodiles' sanctuaries as a further precautionary measure.



**Technical working groups in Balabac, Bataraza and Brooke's Pt were created to coordinate concerns about crocodiles to the PCSDS.**

To keep the crocodiles' habitat intact, she suggested the local leaders to create a program on habitat enrichment and restoration through re-introduction of mangroves. She added that the LGUs may also legislate an ordinance/resolution that will address human encroachment to mangrove areas and river sides, and further impose strict measures to prohibit the dumping of garbage and farm refuse on rivers and beach areas.

While, as we know, crocodiles are notorious for fatal attacks, God never created them without a purpose, says Lagrada.

Citing a recent study "Crocodiles and Their Contribution to the Productivity of Selected Aquatic Ecosystems in the Philippines" conducted by Dr. Angel Alcala, former secretary of the Department of Environment and Natural Resources in partnership with the Crocodylus Porosus Philippines Inc. (CPPI), she said the crocodiles, as "keystone species," are said to be fertilizing the rivers, making it favorable for fishes.

"Lahat ng mga ilog o lugar na lugar na mga crocodiles, lumalabas na mas mataas ang huli ng isda. Inassociate yun sa pwedeng naitulong ng crocodiles sa pag-fertilize ng tirahan ng mga isda," she explained.



**Safety considerations in order to avoid human-crocodile conflicts were primarily discussed during the conduct of lectures in communities identified for IEC.**

sister's husband went near the estuary. He carried with him his fishing spear.

Not an hour passed after plunging into the half-foot-deep water, a one-meter long saltwater crocodile assaulted him from behind, snagging his left leg. He felt its sharp teeth piercing his skin.

But the then 24-year old father wants to live, so never mind the blood spurting off the water as his skin gets torn up like paper, while pulling his legs out from the crocodile's mouth. Although wounded and exhausted, he ran away and, thankfully, managed to escape.

**HUMAN-CROCODILE CONFLICTS** all boiled down to one glaring fact: Habitat loss, destruction and human persecution.

Such conflicts increase over time, as the population of both human and crocodiles that compete for resources to survive also grow, according to Lagrada.

Human and crocodile population growth, habitat loss through conversion of mangroves, among others, are the contributing factors why crocodiles haunt communities and villages, specifically in the coastal areas of southern Palawan towns, such as Balabac, Bataraza, Brooke's Pt and Rizal.

"These generate encounters between people who now have little knowledge about the species," she explained.

Crocodiles seen within the one kilometer range from the general public or the barangay proper suggest that they may likely be attracted to live food prey say livestock and other domestic animals, and other high-protein waste food materials being dumped on river banks or beach areas, Lagrada explained.

This is especially true in coastal barangays the group visited in three southern Palawan towns. At Balabac's ECAN Board meeting, Carman Condes, President of Liga ng mga Barangay, lamented how wild crocodiles had eaten alive the dogs and goats that his constituents tended in Bgy Agutayan.

Balabac Mayor Shuaib Astami, on the other hand, told us that locals even spotted a crocodile at their town port, where his house is also located.

Crocodiles, on the other hand, are considered to be territorial. Studies say chances of possible crocodile attacks are also high when human intrudes into their natural habitat. "And by that, it simply indicates [that] they are just defending their territory as any other creatures do," notes Lagrada.

A quality habitat for this creature should not be lower than 10 km length of river, but because of increase in human activities of villages and



communities along the rivers and coastal areas, the suitable habitat for this species has continued to reduce.

Condes, for instance, pointed out that when illegalists open riverine forest and cut mangroves in his barangay, crocodile sightings begin to be observed.

**HUMAN-CROCODILE COEXISTENCE** could be achieved through a holistic approach that takes into consideration the welfare of human, crocodile and its habitat.

"Conservation of crocodiles goes hand-in-hand with an understanding of and indeed respect for crocodiles- a win-win solution," Lagrada said in her presentation during the series of IECs.

"Sino nga ba ang dapat na turuan natin - ang crocodile o ang tao?" Lagrada added while discussing the safety considerations in order to avoid human-crocodile conflicts.

DMO South Manager Rhoda Roque, on the other hand, organized technical working groups for the towns of Balabac, Bataraza and Brooke's Pt. With its members coming from the respective municipal ECAN Boards, these groups are tasked to coordinate concerns about crocodiles. They are



**Because of human encroachment to mangrove areas and river sides, the suitable habitat for the crocodiles has continued to reduce. (File Photo)**

**Illegally harvested tanbarks and mangrove charcoal kilns were seized in Bgy Tarusan, Bataraza in 2012. (File Photo)**



# BALIK-TANAW

Celso S. Quiling, PCSD Staff

## DID YOU KNOW THAT...

Palawan is the largest province in the Philippines in terms of land area; it has the highest remaining forest cover at 689,161 hectares including mangrove forests; faunal biodiversity of 38.6% of which 5% are endemic.

SOURCE: PCSDS State of the Environment 2015



# PCSD, Preparing for the Silver Anniversary Celebration

PCSDS Executive Director Nelson P. Devanadera led the Staff during the celebration of the Puerto Princesa Underground River on November 11, 2015. (File Photo)

Hello, Palaweños!

This is a comeback section of this new publication, the PCSD Updates, which has originally been part of the then 'Ang Paragua' Newsletter in the 90s. The same objectives are set in place, and that is to bring you to the past and update you on the present activities undertaken by the Palawan Council for Sustainable Development (PCSD) in the implementation of the RA 7611 or the Strategic Environmental Plan for Palawan.

BALIK-TANAW will continue to feature what had happened in Palawan more specifically on the environmental successes attained by the province and other development issues it has and continues to hurdle.

### PALAWAN AND THE SEP

Since its launching in 1992, PCSD has been the principal environmental office in the province. It is a multi-sectoral body mandated to provide a mechanism for the implementation of SEP Law through policy direction and governance.

Policies, such as administrative orders and resolutions, to further guide all sectors of the province in the implementation of the SEP Law were passed for this purpose.

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On August 15, 1992, the PCSD was formally launched at the Provincial Capitol Complex, with national government personalities gracing the occasion.

PCSD held its first meeting on the same date at the then Palawan Integrated Area Development Project Office (PIADPO) in Irawan, Puerto Princesa City. The



1st PCSD CHAIRMAN:  
Former Gov. Salvador P. Socrates



1st PCSD Executive Director:  
Engr. Roland F. Rodriguez

late Gov. Salvador P. Socrates became the first chairman of the Council, while Engr. Roland 'Fuji' Rodriguez, who was then the incumbent executive director of PIADPO by virtue of Sec. 20 of RA 7611, became the first PCSD Staff executive director



Gov. Victoriano Rodriguez with Spkr. Ramon V. Mitra Jr. (center) and Cong David Ponce de Leon during an ADB PIADP Appraisal Mission. (File Photo)



### VISION

Palawan, an innovative and dynamic global center of sustainable development

### MISSION

PCSDS as the driver of environmental conservation and inclusive development in Palawan, a biosphere reserve and science-for-sustainability site, guided by the Strategic Environmental Plan



222<sup>ND</sup> PCSD REGULAR MEETING. (L-R) Council Vice Chairman Dennis M. Socrates, Chairman Jose C. Alvarez and Executive Director Nelson P. Devanadera.