RAMAY - MARAY

All about the Mindanao native marine life.

Davao Gulf Mermaids

Sulu Green Sea Turtles Sanctuary

Tawi-Tawi's Fish Inventory

Butanding Visits and Mindanaoan whale sharks



Once upon a time in the vibrant waters of Mindanao, beneath the azure surface of the Hinatuan Enchanted River, a remarkable community of marine animals thrived. The river, surrounded by lush greenery and vibrant coral reefs, was a haven for a diverse array of aquatic life.

In this underwater paradise, a charismatic dolphin named Delfina led a group of marine friends. Delfina was known for her playful spirit and her ability to bring joy to all the creatures of the sea. The inhabitants of the Hinatuan Enchanted River included colorful clownfish, graceful sea turtles, and schools of shimmering sardines, all living in harmony.

One day, a gentle sea turtle named Tala discovered a mysterious cave hidden in the depths of the river. Intrigued, she gathered Delfina, along with an adventurous seahorse named Sinta, to explore the secrets it held.

As the trio ventured deeper into the cave, they stumbled upon an ancient chamber adorned with radiant pearls that emitted a soft, iridescent glow. The source of this magical radiance was a mystical seashell, which seemed to resonate with the heartbeat of the ocean itself.

The wise elder of the river, a wise old angelfish named Lakan, appeared and explained the significance of the seashell. Legend had it that the seashell was a gift from the ocean spirits, symbolizing unity and the interconnectedness of all marine life. It held the power to strengthen the bond among the inhabitants of the Hinatuan Enchanted River.

Delfina, Tala, and Sinta embraced the magical seashell, and as they did, a wondrous transformation occurred. The once-dormant powers of the seashell awakened, creating a harmonious energy that spread throughout the river.

From that day forward, the marine animals of Mindanao lived in even greater unity. The enchanted seashell became a symbol of their shared connection, and the inhabitants of the Hinatuan Enchanted River celebrated their diversity, fostering a sense of camaraderie that echoed through the waves.

Visitors who came to witness the beauty of the river marveled not only at its enchanting waters but also at the incredible harmony of the marine life within. The legend of the magical seashell lived on, a testament to the enduring spirit of cooperation among the marine animals of Mindanao.





Long regarded as Sirenas or Mermaids by the mariners of old, gentle Dugongs (Dugong dugon) inhabit shallow waters of the Coral Triangle, wherever seagrass is most abundant. These harmless, couch-sized creatures grow to three meters and tip the scales at over 400 kilograms. Alternatively known as Sea Cows, they spend up to eight hours grazing on seagrass. Females give birth to a single calf each three to five years. Calves stay with their mothers for about two years and communicate with their mothers via curious chirps. Slow moving and possessed of poor eyesight, only their size protects them from predators.

Sizeable herds of Dugong once plied the Philippine archipelago until hunting and habitat degradation reduced overall numbers. Small pockets now hold out in Southern Mindanao, Palawan and Isabela – keeping seagrass meadows cropped, healthy and productive.

Dugongs are thought to live up to 70 years, but rarely grow this old. They are classified by the IUCN as Vulnerable and are protected under DENR Administrative Order No. 55, Series of 1991. It is one of the flagship species that the World Wide Fund for Nature (WWF) protects in the Philippines.

WWF-Philippines Vice-Chair and CEO Lory Tan says Davao Gulf ranks as one of the priority conservation areas of the Sulu-Sulawesi Marine Eco-region. "It is a breeding and nursery ground for small and large pelagic species, with frequent Dugong sightings. Sadly, the Davao Gulf is being threatened by the very economic activities it supports."

WWF-Philippines' Davao Gulf conservation and protection programs are being implemented in conjunction with the initiatives of the Davao Gulf Management Council composed of five coastal cities and 18 coastal municipalities surrounding the Davao Gulf.

The Dugong is the fourth member of the order Sirenia, alongside the three manatee species. A fifth, the gigantic 8-meter long Steller's sea cow (Hydrodamalis gigas) was completely wiped out in 1768, just 30 years after being discovered.

Says Tan, "Environmental exploitation by humans is a consequence of growing poverty. Fish yields have decreased, leading many to adopt destructive fishing methods in order to survive. Dugong populations have dwindled due to boat propeller accidents and fishnet-caused drowning.

Preserving Paradise: Marine Conservation Efforts in Mindanao

written by Lean Dancel

Nestled in the heart of the Philippines, Mindanao stands out for its cultural diversity and mesmerizing marine ecosystems. The waters surrounding Mindanao teem with a diverse range of marine species and coral reefs, making it a vital hub for biodiversity. However, the region grapples with numerous challenges, including overfishing, habitat degradation, and the impacts of climate change. In response to these threats, various initiatives and organizations have joined forces to lead marine conservation efforts in Mindanao, tirelessly working to preserve its aquatic wonders.

Diverse Marine Environment

Mindanao is home to a distinctive marine environment, featuring pristine coral reefs, seagrass beds, and mangrove forests that serve as essential habitats for a variety of marine life. Its inclusion in the Coral Triangle, recognized globally as a hotspot for marine biodiversity, underscores Mindanao's significance in the ongoing effort to conserve and sustainably manage marine resources.

Challenges to Conservation

Despite its ecological importance, Mindanao faces significant challenges that jeopardize its marine ecosystems. Overfishing, fueled by the demand for seafood, poses a substantial threat to fish populations. Destructive fishing practices, such as blast fishing and cyanide fishing, add to the problem, causing irreversible harm to coral reefs.

Pollution is another pressing concern, with coastal communities contending with improper waste disposal and the discharge of pollutants into marine environments. Additionally, the impacts of climate change, including rising sea temperatures and extreme weather events, pose threats to the delicate balance of Mindanao's marine ecosystems.

Grassroots Conservation

Recognizing the interdependence of human communities and marine ecosystems, many conservation initiatives in Mindanao adopt a grassroots approach. Local communities actively participate in the design and implementation of conservation strategies, fostering a sense of ownership and responsibility.

Community-based marine protected areas (MPAs) are established to safeguard critical habitats and allow fish stocks to recover. These MPAs are often managed by local fisherfolk, who undergo training in sustainable fishing practices and resource management. This collaborative approach ensures that the benefits of conservation efforts are shared within the community, promoting long-term sustainability.

Government & NGO Involvement

Mindanao's marine conservation efforts receive essential support from governmental bodies and nongovernmental organizations (NGOs). Government agencies, such as the Bureau of Fisheries and Aquatic Resources (BFAR), play a crucial role in enforcing fishing regulations, monitoring marine activities, and implementing conservation policies. NGOs contribute significantly to raising awareness, conducting research, and executing on-theground projects. Organizations like the World Wide Fund for Nature (WWF) and Conservation International collaborate with local communities to implement sustainable fisheries management, coral reef restoration, and educational programs.

Innovative approaches

In response to evolving challenges, innovative solutions are emerging to enhance marine conservation in Mindanao. Technology, including the use of artificial intelligence for monitoring and surveillance, is being explored to combat illegal fishing activities. Sustainable aquaculture practices that reduce pressure on wild fish stocks are gaining traction.

Tawi-Tawi has more vital reef fish species than Palawan!

If you thought Palawan's marine biodiversity was Insta-worthy, a place not too far south just might change your mind about all that: Tawi-Tawi. Researchers recently found that the province has more species of commercially-important coral reef fish than either Palawan or Panay, showing just how much we have yet to learn about biodiversity in the country's southernmost region.

According to a team from the Mindanao State University-Tawi-Tawi College of Technology and Oceanography (MSU-TCTO), the University of the Philippines-Diliman, and the University of the Philippines-Mindanao, Tawi-Tawi has a total of 266 of these economically vital species, compared to Palawan's 159 and Panay's 139.

A dizzying abundance of fish

A walk through any of Tawi-Tawi's many public markets (called "tabuh") and fish warehouses (or "bodega") can be an overwhelming experience for anyone, with all manner and kinds of fish up for sale or on display every day. Large predatory fish like lapu-lapu (grouper) and sharks are a regular sight, as well as rabbitfish, goatfish, emperors, and coral breams. Common fish are sold at the tabuh, while high-value and live reef fish are sold to the bodegas.

The researchers sampled coral reef fish sold in the tabuhs and bodegas of Bongao, Tawi-Tawi, from October 2015 to December 2018. They focused on 11 commercially important coral reef fish families and subfamilies: surgeonfish (family Acanthuridae), parrotfish (subfamiliy Scarinae, family Labridae), snapper (family Lutjanidae), grouper (subfamily Epinephelinae, family Serranidae), sweetlips (family Haemulidae), goatfish (family Mullidae), emperor (famliy Lethrinidae), triggerfish (family Balistidae), coral bream (family Nemipteridae except Nemipterus), fusilier (family Caesionidae), and rabbitfish (family Siganidae). These are considered "commercially important" because these are the fish typically sold in the markets and eaten.

All in all, the researchers photographed and identified a whopping 41,864 fish from the 11 families.

A surprising mystery

Tawi-Tawi, Palawan, and Panay are all located along the Sulu Sea, which has the highest coral reef fish diversity in the country. But why does Tawi-Tawi have more commercially important coral reef fish species compared to Palawan and Panay?

First, Tawi-Tawi is in the heart of the Coral Triangle, which is the richest region in the world in terms of marine biodiversity. Within the Coral Triangle, you find the highest diversity at the center of origin, and find fewer species as you go farther away.

Second, Tawi-Tawi is part of the Sulu Archipelago, which is located at the border of the Sulu and Sulawesi Seas. This means that fish species from both seas overlap and are found in the area.

Third, Tawi-Tawi is composed of over 300 islands with reef systems. The seas between islands are deep and the currents strong, which serve to isolate the fish communities between islands. Coral reef fish also typically do not move very far away from their home reefs.

Fourth, the current in the Sulu Sea moves predominantly southwards, and so it carries fish species from the northern areas (Palawan and Panay) to southern areas (Tawi-Tawi).

And fifth, there's less fishing pressure in Tawi-Tawi compared to Palawan and Panay. In 2016, total landed catches for Tawi-Tawi totaled just 45,857.71 metric tons, compared to Palawan's 130,155.15 metric tons and Panay's 90,202.79 metric tons. Bigger catch sizes mean a bigger strain on fish populations. Also, commercial fishing (fishing done with boats more than 3 gross tons in size) accounted for 42.4% of the catch in Panay and 18.5% in Palawan, but only 2.6% in Tawi-Tawi.

Having more species of commercially-important coral reef fish has cultural and social implications as well. "For us locals, this is a point of pride," explains Dr. Richard Muallil, Director for the Office of Continuing Education and Extension Service (OCEANes) of MSU-TCTO and the study's lead author. "These biodiversity-rich reefs are our national treasure and provide ecosystems services such as food, income from fisheries and tourism, and may be the source of new medicines. Healthy reefs also protect coastal communities from the severe impacts of climate change."

However, the reefs in Tawi-Tawi are under threat from increased fishing pressure and illegal, unreported, and unregulated (IUU) fishing.

"There are very few conservation groups working in Tawi-Tawi, except maybe in Tawi-Tawi Bay and in the nationally protected Turtle Islands. The government and conservation groups also need to protect remote reefs not just in Tawi-Tawi, but in the rest of the Philippines," stressed Dr. Muallil.



A battle for conservation

The abundance of natural gas in the marshlands cannot be understated as it can even be smelled in the air. Because of its resources and potential for oil and gas profits, there has been many discourse about its ownership and its uses. Many people push for commercial projects on the land while many oppose it.

Various groups have claimed it to be ancestral land. There also have been concerns raised regarding the environmental sustainability of pushing projects on the land due to the many species that rely on it as a habitat, along with the fear of the Moro families that live and work there being displaced due to the scale of the oil and gas extraction projects that have been planned.

It's the only place in the Philippines where the Mindanao endemic subspecies of the little grebe (*Tachybaptus ruficollis cotabato*) and the comb-crested jacana (*Irediparra gallinacea*) can be found. It's also one of the last strongholds for the endangered Philippine crocodile (*Crocodylus mindorensis*). The Philippine eagle (*Pithecophaga jefferyi*) can also be found in the forest areas of the marshland.

Several rare palms, orchids and ferns like the water hyacinth (Eichhornia crassipes), anahau palm (Livistona rotundifolia), buri palm (Corypha elata), nipa palm (Nypa fruticans), areca nut (Areca catechu), screw pine (Pandanus tectorious), sweet flag (Calamus mallis), bird's nest fern (Asplenium ridus), and oak leaf fern (Drynaria quercifolia) are found in the marsh from the freshwater in it.

Butanding visits Misamis Occidental's Medina Port

Last January 7, Medina Port got a surprise visit from a whale shark!

Whale sharks are commonly sighted in Philippine shores, especially in Mindanao. A recent video posted on Facebook by user Rey Mart shows a whale shark, also known as a "butanding", swimming by the Medina Port in Misamis Occidental, Mindanao.







What can we do?

It is generally urged in Philippine local governments to enforce and coordinate with local fisheries and environmental groups to aid in protecting whale sharks and their habitats. It is possible that more laws will be established and programs on awareness regarding the hunting of whale sharks will be held.

For the conservation of whale sharks, here are some things the average person can do:

Learn and dispel your own bias against whale sharks and sharks in general. Popular culture and media commonly depict them as dangerous predators, especially due to their size, but just like every animal, they are creatures who want to live their life and fulfill their role in the ecosystem.

Doing what you can for the ocean helps them too, as the seas are their home. Advocating for reducing the amount of waste and pollution in the ocean and our beaches will go a long way.

One industry that impacts whale sharks greatly is the commercial fishing industry, as sharks are considered an exotic source of food., a popular example being shark fin soup. Their deaths can also be a byproduct of fishing as they get caught in nets or crash into large ships and fishing boats. To combat this, one can reduce seafood consumption or choose sustainably caught seafood.

When seeing whale sharks, especially in a tourist context, it is important to follow guidelines and keep your distance. Ensuring not disturb them through sudden physical contact or activities like flash photography keeps them safe and comfortable in their habitats.

And to further our knowledge of these wonderful creatures, it is encouraged to research more about whale sharks. It is especially needed in the Philippines to gather new information about whale sharks in order to devise new ways to help them in our own way and in the seas we share with them.





Hidden island gem

Lapsay Lagoon is filled with caves, coves, and islets located right in Tinago Island, Tagana-an, Surigao del Norte.

Developed by Tinago Holiday Resort, this rising tourist destination offers many activities such as: snorkeling, canoeing, island hopping, mountain trekking, adventure/burial caving, mangroves tour, swimming, boating, rafting, cliff hanging, surfboarding and body boarding.





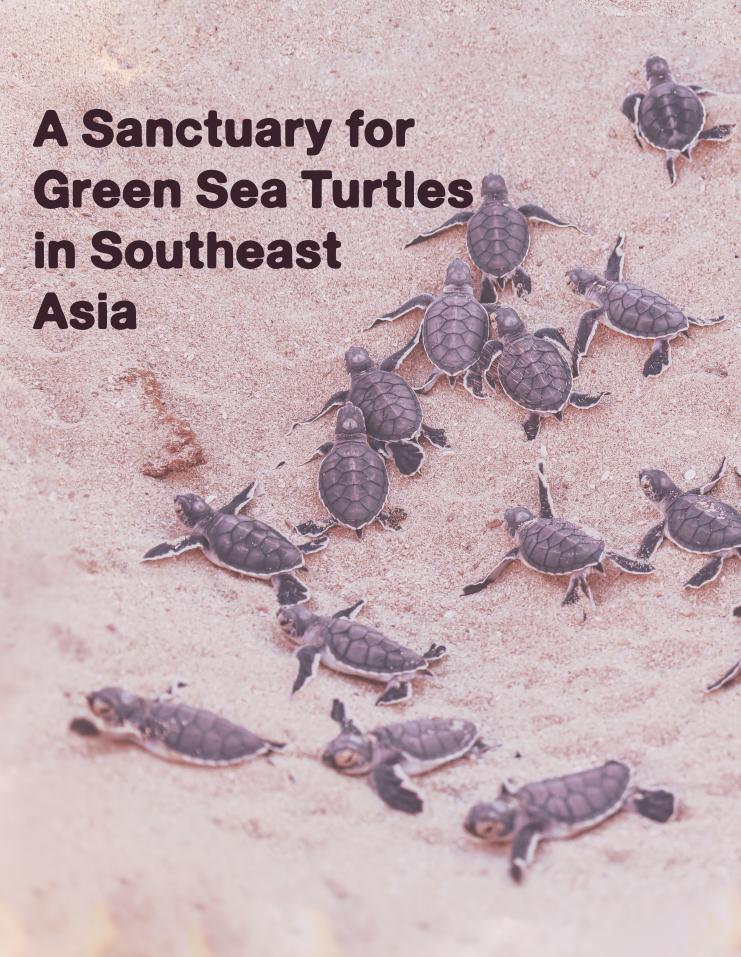
The lagoon offers a tranquil scenic experience with its greenery and clear waters available for swimming, so long as no one litters or take anything from the island such as corals, plants and flowers, and oysters, shells, and other creatures.

To get there, one must start from Surigao City, which can be reached from Butuan City if one is not from Mindanao. Drop off at the crossroad to Tagana-an. From there, take a habal-habal to the wharf in front of Tagana-an Public Market, where a motorboat is bound for the Tinago Holiday Resort.

A quiet safe place

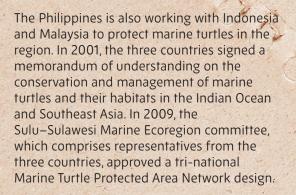
Here also houses a large protected marine sanctuary of many marine animals and creatures such as fish, shellfish, and other sea creatures.





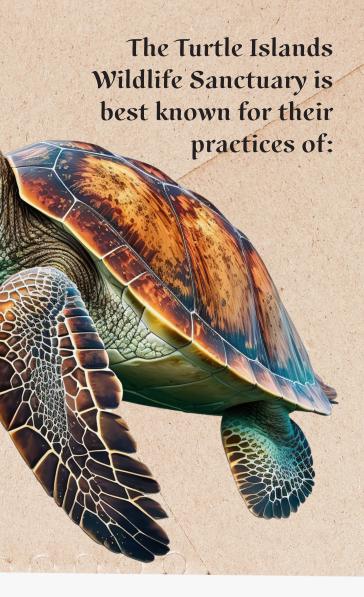


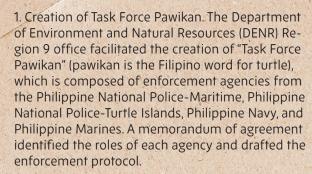




Even earlier, the Philippines has partnered with Malaysia to establish the Turtle Islanads Heritage Protected Area in 1996 as the first transboundary protected Q for marine turtles in the world. It is the 11th major marine turtle rookery in the world: an important nesting site for the green turtle and, to a lesser extent, the hawksbill turtle. The protected area was a recipient of the J. Paul Getty Wildlife Conservation Prize award in 1997.







- 2. Engagement with local communities. Nine park wardens were hired from local communities to safeguard marine turtle nesting and hatchery sites in four islands. They also monitor illegal activities.
- 3. Enhancement of Women's Group in Taganak. The Women's Group in Taganak is known for their souvenir items made from plastic waste and indigenous materials. Working with out-of-school youth, they attribute their increased annual income to the Adlaw Sin Payukan (Day of the Sea Turtle) festival, which is celebrated on World Turtle Day on 23 May.
- 4. Financing mechanism. The Turtle Islands Wildlife Sanctuary was nominated as a UNESCO World Heritage Site in 2015. Efforts continue to pursue this distinction through regular provision of government funds and linkages with government institutions for capacity building on community-based ecotourism and livelihood support for enhanced fishery.
- 5. Sustainable income. Community-based tourism activities in the sanctuary include the production of souvenir items, ecotourism products and services, the annual Adlaw Sin Payukan festival, and product development and packaging.







Linutlot Steamed Goodness

In the city of Malabon houses a traditional cooking technique. From the abundance of bamboo that have made their mark in the city's lifestyle, build, and culture, the art of Linutlot was born.

Linutlot is a technique that came involves stuffing food inside a bamboo tube and cooking it over charcoal. The process is described to be similar to be a pressure cooker.

It is also considered a Lumad culinary tradition, practiced by the Manobo and Bukidnon indigenous tribes.

Linutlot is typically used to cook fish, chicken, or even frogs.

Despite not being known outside the Mindanao regions, it is a cooking tradition that is still alive and enjoyed by many today.



Linutlot No Kotipa Woy Ow-an

Here's a recipe from North Cotabato by Representative Nancy A. Catamco that you can try with the Linutlot cooking tradition!

Ingredients

Kotipa (catfish), cubed

Ow-an (mudfish), cubed

2-inch piece of ginger, sliced

6 shallots

3 tomatoes, chopped

1 garlic, crushed

6-8 lemongrass stalks, divided into 2 tied bundles

1/2 cup vinegar

1/4 teaspoon salt

Young bamboo tube, open on one end

Procedure

Combine kotipa and ow-an with ginger, shallots, tomatoes, garlic, one bundle of lemongrass, vinegar and salt. Stuff bamboo tube with fish mixture and seal open end with the other bundle of lemongrass.

Lay bamboo tube over an open fire and grill until surface is charred, turning to cooking evenly on all sides. When done, split open bamboo tube in half and serve with steamed rice. Enjoy!

Curacha Crab:

Delicacy from

the Depths

written by Jada de Leon

Crabs have long been a staple in seafood cuisine, delighting taste buds with their succulent and flavorful meat. Among the myriad of crab species, the curacha crab stands out as a unique and exotic delicacy. Hailing from the waters of the Philippines, the curacha crab, also known as the spanner crab or red frog crab, offers a distinctive taste and texture that captivates seafood enthusiasts worldwide.



The curacha crab (Ranina ranina) is a species of deep-sea crab found in the warm waters of the Sulu Sea in the southwestern part of the Philippines. It is particularly abundant in the waters surrounding the Zamboanga Peninsula. Its name, "curacha," is derived from the Spanish word "cucaracha," meaning cockroach, owing to its unique appearance that somewhat resembles the said insect.

One of the most striking features of the curacha crab is its large, flat carapace, resembling a disc-shaped shield. Its body is wide and flat, with distinct segments and a distinct red hue, which intensifies when cooked. The crab's legs are wide and flat as well, giving it a distinct appearance compared to other crab species.



What sets the curacha crab apart is not just its appearance but also its delectable taste. Its meat is sweet, succulent, and boasts a tender texture. The flavor is often described as a harmonious blend of the sweetness found in crabmeat and the richness associated with lobsters. The unique taste profile of the curacha crab makes it a sought-after delicacy in the culinary world.

In the Philippines, the curacha crab is often prepared in a variety of ways to showcase its exquisite taste. One popular method is to serve it in a flavorful coconut milk stew, creating a dish known as "Curacha alavar." The crab can also be grilled, steamed, or fried, allowing chefs to experiment with different preparations while highlighting its natural sweetness.



Sustainable Harvesting

While the curacha crab is a delicacy, conservation efforts are crucial to ensure the sustainability of its population. Responsible and sustainable harvesting practices, along with proper management of fishing grounds, are essential to maintain the delicate balance of marine ecosystems. This ensures that future generations can continue to savor the unique flavors of the curacha crab.

The curacha crab's distinctive appearance and delightful taste make it a treasure of the Philippine seas, earning its place as a sought-after delicacy. Whether enjoyed in traditional Filipino recipes or incorporated into innovative culinary creations, the curacha crab continues to captivate seafood enthusiasts, inviting them to explore the depths of its rich flavor and unique charm. As we savor this exotic delight, it is crucial to embrace sustainable practices to ensure that the curacha crab remains a culinary gem for generations to come.

Curacha Alavar

Ingredients

1 kg fresh curacha crabs
2 cups coconut milk
1 cup alavar sauce (recipe below)
1 large onion, finely chopped
4 cloves garlic, minced
1 thumb-sized ginger, julienned
2 red chili peppers, sliced
1/2 cup green bell pepper, julienned
1/2 cup red bell pepper, julienned
1/2 cup malunggay (moringa) leaves
2 tablespoons cooking oil
Salt and pepper to taste

Procedure

Thoroughly clean the curacha crabs, removing the gills, and scrubbing off any dirt or impurities. Cut each crab into halves. In a large pan, sauté garlic, onion, and ginger in cooking oil until aromatic. Add the sliced chili peppers and continue to sauté for another minute. Pour in the alavar sauce and coconut milk. Stir well to combine. Add the curacha crab halves, ensuring they are evenly coated with the sauce.

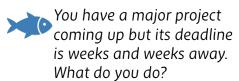
Simmer over medium heat until the crab meat is cooked and the sauce has thickened. Season the dish with salt and pepper according to your taste preferences. Serve the Curacha Alavar hot, with steamed rice.





What sea animal are you?

Here's a fun quiz to try!



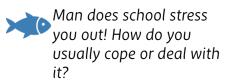
(4 points) Finish it immediately (3 points) Plan it out first (2 points) Just work as you go (1 point) Cram it last minute

Ideal comfort food you'd eat after a long day?

(4 points) Something meaty (3 points) Homecooked dish (2 points) Childhood snacks (1 point) Lots of sweets

You get to have vacation at a location of your choice! What's it going to be?

(4 points) Somewhere unkown (3 points) A trendy tourist spot (2 points) Your hometown (1 point) Your bed



(4 points) Take proper breaks (3 points) Time management (2 points) Hang with friends (1 point) Indulge in hobbies

Your most favourite hobby?

(4 points) Arts and crafts (3 points) A sport (2 points) Reading (1 point) Video games

Your friend is upset about something. What's your first action to you cheer them up?

(4 points) Take them out (3 points) Talk about it deeply (2 points) Give them gifts (1 point) Give them space

if you get 6 or less points:





if you get at least 20 points:





Curacha

