





# MY FRIEND DUGONG

## **Chanchal Singha Roy**

Translated from Bengali by Sumita Sengupta

#### MY FRIEND DUGONG

(A tale of friendship between a boy and endangered marine mammal)

By

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Translated from the original Bengali version by *Sumita Sengupta* 

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### **FOREWORD**

In early years of shipping, sailors around the world claimed to have seen a real mermaid. In 1492, even the legendary sailor Christopher Columbus reported mermaid sightings in his voyage towards North American shores. These mythical mermaid sightings, could probably be of the now well-known species of manatees or dugongs.

Dugongs or Sea Cows, the only existing species of herbivorous marine mammal, are found along the coasts of Australia, south-east Asia, Indian sub-continent, Arabian Gulf west coast of Africa and coastal waters of India. They feed on unique underwater flowering plants known as seagrasses and live within calm sheltered, shallow waters, surfacing every 2-4 minutes to breathe fresh air. In India, dugongs are found in Tamil Nadu, Gujarat and Andaman & Nicobar Islands. Their populations in these three states are small, fragmented and rapidly declining with a looming threat of extinction. Several threats contribute to their continuous population decline, which include seagrass habitat loss and degradation, fishnet entanglement, indigenous use and hunting and coastal pollution among others.

In 2015, the Ministry of Environment, Forest and Climate change (MoEFCC) entrusted Wildlife Institute of India (WII) to prepare and implement Species Recovery Plan of Dugong to recover their population and restore the seagrass habitats with financial supports from Compensatory Afforestation Fund Management and Planning Authority (CAMPA). WII initiated necessary ground interventions to ensure the long-term survival of dugongs in the wild through multi-stakeholder partnerships and support of the local communities. With the help of State Forest Departments, Indian Coast Guards, Indian Navy, State Fisheries Departments, State Tourism Departments and fisher communities, we aim to recover the population and habitat of dugong in India within next two decades.

One of the key stakeholder in Dugong conservation is none other than the school children. To involve them directly in this active conservation program, we have started a unique participatory Dugong Scholarship Program through which several school kids belonging to fisher communities are getting benefitted. This scholarship program has brought us in direct contact with fisher communities and generated holistic awareness about dugongs and their role in the marine ecosystems.

In this comic book, written by Sh. Chanchal Singha Roy, a school teacher in the Andaman & Nicobar Islands, we share a heart-warming story of the friendship between a boy Lingaraju and a Dugong from Andaman Islands. Translated into 6 languages, this book will be distributed in every school library of the three dugong ranging states. We hope that through this book the marine gentle giants of Indian shores, the dugongs will find their way into the minds and hearts of the children.

Dr. K. Sivakumar

Scientist Wildlife Institute of India

# TO MY STUDENTS OF NEIL & HAVELOCK ISLANDS





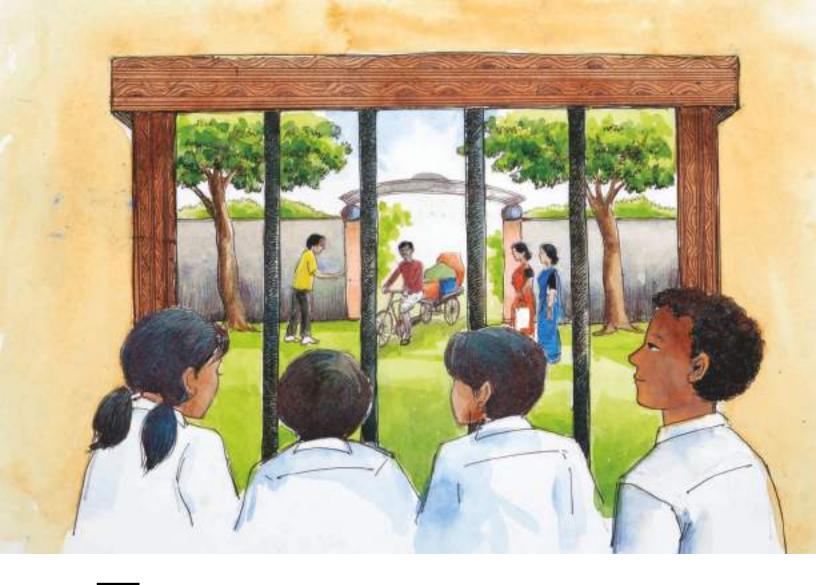
fter days of nonstop wind and heavy rain, it is peaceful and quiet today. The sea looks a more vibrant shade of blue under the cloudless, bright sky. It is Sunday, a holiday. Like every Sunday, Lingaraju has come to the Laxmanpur forest to take back the goats that had been set free to roam there. Dusk will not set in for quite some time. Crossing the jungle, Lingaraju reaches the sandy beach and looking around, settles down on the sand. His deep, dark eyes searching for someone or is it something? He is excited, looking here and there, not sighting what he is looking for.

Lingaraju's young mind is full of questions. Has the gale and the heavy rain made it go somewhere else? No, that can't be! Engrossed in this silent debate, he doesn't notice that the sun has set, and the blue sea has taken on a blackish green hue.

Breaking out of his trance, he jumps up, dusts the sand off his half pants, and runs back into the forest. Out of habit, the goats had made their way to the paved road, following the narrow path in the jungle. They were waiting there in a group.

Has it really left? But where to, mused Lingaraju. Will I ever meet it again?





he bell for the second period rang almost simultaneously with the siren from the jetty indicating the berthing of the jetty. The gate of the school could be seen directly from Linga's classroom. Though the second period had started, Linga, Krishna Rao and Jogga were not paying attention. Again and again, their gaze shifted to the main gate.

The boat must have come sometime back. Where are the people from the NGO? The children were expecting it because the principal had announced it the day before.

"Why haven't they come?" whispered Jogga from behind his hand.

"Sit straight", whispered back Linga, "Ma'am is looking at you".

Suddenly, they heard the loud noise of the gate opening and immediately all eyes shifted from the blackboard! A van-rickshaw and a jeep had brought some people. It was only when their teacher scolded them, did their attention drift back to class.

Since the tsunami many NGOs kept coming to Neil Island and the children became quite familiar with their activities. They loved doing the activities that the people from the NGO did. It meant going out of the classroom, learning to look at nature and their surroundings from a different angle and lots of gifts.

After awhile, three people entered the school, laden with things.

By tiffin break, everyone knew that the people from the NGO had come, and the students of classes 6 to 8 were asked to assemble in the grounds. The grounds had the school building on one side, and beautiful Neem and Mango trees on the other sides. The cool breeze from the sea in the morning and the shade of the Neem trees created a unique atmosphere, appreciated by all the students.

A banner had been hung from two of the trees "Awareness Program on Protection and Conservation of Marine Animals". Lingaraju, along with his friends Krishna Rao, Dinesh, Jogga Rao, Zakaria, Vijay and Ramesh sat in the first row. The others - Meena, Bikash, Laxmi, Amit, Arup, Rajeev and Ganesh were in the second row.

Rajan Sir from the NGO introduced Vimla, Hema ma'am and himself - and the activities that they would do over the next four days. There would be a sightseeing tour, discussions and the students would also get a chance to speak and share their views. On hearing this, the students and teachers started clapping, each barely able to contain their excitement. The sound of applause spread right across the quietness of the afternoon.

Hema ma'am said "we will introduce ourselves, but in a different way. For example my name is Hema, but when I introduce myself, I will add the name of an animal that is found in the sea before my name. My name will then be Dolphin Hema!"

The children laughed out loud. It sounded like a fun and interesting way to introduce oneself.

Jogga stood up first. "Ma'am, my name is Surmai Jogga." Everyone laughed and clapped. One by one, each student introduced themselves.

Should I add the name of my friend? The one that I had seen and touched when I gone snorkeling, thought Linga. He was about to say the name, but stopped. What if they know it by some other name? What if...?

Heam ma'am voice broke into his thoughts. "Why are you sitting quietly? Come tell us your name" she said.

"Tuna Linga", he responded quickly.

"Very good, said both Rajan and Hema. We get a lot of Tuna in the waters near the Andaman islands".

After the introductions were over, Vimla ma'am started telling the students about sea creatures using colorful photographs. She told them about their habitats, how they take in food, what parts of they use and how they reproduce.

Sitting there, on the ground, under the shade of the trees, Linga, Jogga and Krishna were transported to the world of marine creatures, without the use of any textbooks!

"This learning", said Hema ma'am, "is not to get more marks in the exams. This is so that you can know for yourself, and then share with others. This is so you can protect and preserve the oceans and all that live in them."

"Let us stop here now, tomorrow we will meet at nine in the morning, watch documentaries about the sea, and of course, you must tell us about your experiences. We will learn so much from you!" said Hema ma'am.

Linga and his friends did not really want to go home. They could have stayed for hours listening to stories of the sea.

Linga, the confirmed back bencher, reserved his place in the front row, much to the amusement of his friend Krishna.

Like every other day, Linga went home after school, had his lunch and took out the goats for grazing. School was great fun that day, but Linga felt a strange sadness in his heart. When he had introduced himself, he had not been able to give his friend name.

The western part of Neil Island is covered in huge, dense forest, and has pristine white sand beaches, sand dunes, and flat land. It has the first village of Neil Islands and is also called Number one because it was the site of the first refugee settlement. The other villages also have numbers according to when they were made.

As soon as Linga entered the Laxmanpur forest, the goats moved away, looking for green grass to graze on. Linga sat down on the sandy beach having noted the direction in which the goats had gone.



Linga was dispirited and unsettled. He had not seen his friend in a long time. He sat down on the sand and looked steadily at the sky. The sea was quiet, almost like a pond-no high waves, no turbulence. It was as clear and transparent as glass. The cool breeze made Linga shiver.

Though Linga speaks clear, faultless Bengali, his family is Telugu. Almost 26 years ago, Linga's Tata (grandfather), his Naina (father) and Amma (mother), paternal uncle left their village, Kotturu, in the Srikakulam district in Andhra Pradesh. They boarded a ship at Madras (now Chennai) and reached Port Blair. From there, they came to Neil Island.

The family owns a small plot of land, and a house made of tin, wood and coconut leaves. There is a shed for their cows and goats. They also have a few coconut trees. Linga is the eldest of the siblings; Hemavati and Bhagyavati are his younger sisters.

Linga's father collects different goods from the boats that come from Port Blair, loads them on van rickshaws and takes them to different shops. After he gets back he helps to load vegetables onto the boats that return. In his spare time, he works as a farm hand for other land holders. Linga's mother, after doing all the household chores, helps his father on the field. She also goes out to sell the goat and cow milk that she collects and on market days, helps to load vegetables.

Days are very short during the months of December and January. The late afternoon light fades very quickly and the light from the North Bay light house can be seen clearly from Laxmanpur Beach. Linga loved to see the lights coming from the distance.

In the midst of his reverie, Linga suddenly heard a splash from the hitherto quiet sea. A familiar splash! In a flash, he kicked off his slippers and ran to the sea, diving in.

The ecstatic Linga saw his friend, finally! His friend swims very close to Linga, happy to allow himself to be stroked by the joyous boy.

"Where were you all this time? Do you know how far and wide I have looked for you? How worried I was? I waited for you every evening." Linga asked all the questions he was waiting to ask.

When he came up for air, Linga noticed that the darkness of the evening had finally sea in and he remembered the goats grazing in the forest and the fact that he must go home!

Although he would have much rather stayed on with his friend, talking and playing in the sea, Linga knew he must return home. Bidding goodbye, Linga swam back to the shore, his friend's voice ringing in his ears.

He stood on the beach, soaking wet and distraught. The goats were nowhere to be seen and darkness had almost completely engulfed the surroundings.

Feeling helpless, Linga managed to make his way back towards his house. At the crossing of the kaccha path from the jungle and the road, he saw the goats huddled together. Linga's worry immediately vanished. Walking back home with the goats, Linga thought about his friend.

The local residents of Neil Island call his friend the "Jal suar". Does his friend really look like boar? Or may be more like a cow? Linga did not like the name "Jal suar" for his friend. He felt an annoyance well up inside him. No. His friend must have another name. A better one.

The next morning found Linga's class in good spirits. None of them could concentrate on any regular school work, and were all eagerly waiting for Rajan, Hema and Vimla from the NGO to arrive.

As soon as the bell for the second period rang, the students assembled in the hall. After wishing them a very good morning, Hema ma'am asked them about what they knew about creatures of the sea.





"What types of creatures have you seen around the Neil Islands? Do you know of any incidents involving these creatures? Please, do not be shy, we are here to listen to you," she said.

Then something magical happened. Students, who were known to be shy and withdrawn, started sharing their experiences and knowledge with ease and spontaneity – be it about jellyfish, octopus, coral, tiger prawn, dolphin and other fish. Samir sir, the class teacher of Class 7, noticed this change in his

students with wonder. Used to the usual classroom teaching which become monotonous even for them, the teachers also listened carefully to what their students were saying, exclaiming and talking amongst themselves about what a change they were seeing in the children!

Krishna Rao spoke about his father's experience as a fisherman, and how a huge fish had once overturned his father's dungi. Krishna told them about how her mother dries fish before selling them in the market, and how they pray at the family temple every morning hoping for a good catch.

"Do you know the name of the state animal of the Andaman and Nicobar Islands? You can also find it in the waters near Neil Island," asked Rajan Sir. The students started whispering amongst each other, trying to guess the name of the animal Rajan sir was talking about, their curiosity evident in their shining eyes.

"When you see the documentary, you will be able to identify the animal easily," said Rajan sir.

The students settled down in the darkened assembly hall, all eyes on the screen. The saw a small island, covered with trees and a small strip in the middle of all blue sea, small boats scattered in the sea, dancing in step with the waves.

"Look Ramesh, there is something white in the water!" exclaimed Krishna, barely able to contain his excitement.

"Yes yes, I see it too!" said Ramesh, almost standing up in his place.

The image of the creatures flashed on the screen.

"The Jal suar! We have seen it in the water many times. My father says it looks like pig!" a chorus was heard amongst the students.



"This is the state animal of the Andaman and Nicobar Islands", said Hema ma'am.

While the rest of the students were talking softly to each other, or responding to Hema mam's questions, Linga was staring at the screen, absolutely transfixed. He has never dreamed

that sitting in the school hall, he would be able to see his friend.

"Do you know the name of these creatures?" asked Rajan sir.

"No, we don't!" chorused the hall.

"This creature is called the Dugong. They are big mammals and only eat sea grass. This means that they are vegetarians. In the Malaya language, Dugong means the Lady of the Sea. Of course, they have many local names like Sea Cow, Sea Hog and some even call them Sea Camel!" explained Rajan sir.

Linga liked the name Dugong the most. He quickly took out his pen from his pocket and wrote the name down on his hand lest he forget. "Dugong, my friend Dugong" he whispered to himself. He felt very grateful to his uncle for allowing him to borrow his snorkel, the fateful day he saw his friend for the first time.

The Dugong on the screen was now grazing on the grass growing on the sea floor. "Look, the Dugong is eating grass just like a cow, maybe that's why it got the name Sea Cow", Linga whispered to Rajeev, Nagesh and Chinna.

"Remember when I had told you that the Dugong is a vegetarian that only eats sea grass? That is why they are found only where there is sea grass. Another interesting thing is that the Dugongs play an important part of the food chain," said Rajan sir.

"The sea grass gets their energy to make food from the Sun. Sea creatures, like the Dugong eat the sea grass and the energy passes on to them. The waste that these animals produce is then eaten by small fish that swim in the waters and so the energy passed on to them. Small fish can grow into bigger fish, or sometimes, are eaten bigger fish. Fishermen, like







Krishna's father catch these big fish, and we buy them from the markets. The fish provide us with a lot of nutrients," said Rajan sir.

Linga's heart swelled with pride when he heard this. His friend is actually helpful humans and the ecosystem!

Vimla ma'am, whose kind demeanor and motherly nature the children loved, stepped forward. "Indirectly, the Sea Cow acts like a care giver for the smaller fish. Because this, the smaller fish grow and in turn provide us with nutrition. We can never ignore or forget the contribution of the Sea Cow." she said.

"Ma'am, does Sea grass grows everywhere?" asked Shankar.

"That is a good question. No, it doesn't. It only grows in wide, shallow and protects sea beds, for example near the coasts, or near mangrove areas. The Dugong can easy pull out the grass from the sea bed. However, if it is not possible to pull out the place they eat only the leaves. Their sense of smell and taste is very strong, making up their poor eyesight. They have very strong bodies, using the fins in front to balance while grazing." Vimla ma'am explained this showing picture of the Dugong to a rare audience.

"Dugongs live near Neil Island, but we knew nothing about them," remarked Seema.

"Yes, all we knew was that they are also called Sea hogs!" agreed Subbalakshmi.

"Well, there is a lot more to learn about Dugongs, and that is why we are here. By knowing more about the creatures, you will learn to love them, and that love will help you protect them," said Rajan sir.

"Are dugongs only found in the Andaman seas?" asked Ramesh.

"They are also found in the Gulf of Kutch near Gujarat, in the Gulf of Mannar and even in the Persian Gulf, China, Japan and the Philippines," said Rajan sir.

The students continued to watch the documentary which was showing a female dugong and her cub move as if to the rhythm of the waves. Linga's mind drifted away from the discussion about the Dugongs and to the seas and the beaches of Radha Nagar, Strait Island and Long Island, and his friend the Dugong. He dreamt of riding the waves on the back of his friend and travelling to all these islands.

Even after being prodded by his friend Krishna, Linga refused to share his stories. What if people laugh at me?

Before the day's activities ended, the students were given an assignment - to ask their parents and grandparents about what they knew about the dugong and if they had any interesting experiences that they could share.

efore dusk, Linga came back with the goats as usual, had his bath keeping an eye on his hand to see if the writing had been washed away. He then accompanied his mother and the ladies to the temple of the family god, Goddess Maikini. They lit a lamp every evening at the temple, and his father and the other men would pray there before going out fishing, often very late at night.

Linga then settled down to his studies, with the aromas of the sweets his mother Alamelu was making for the festival of Makar Sankranti wafting in from the kitchen. Even though he had to prepare





for his exams, Linga could not concentrate. His thoughts drifted back to the day he first met the Dugong.

Apart from fishing, working in the fields and carrying loads to and from boats, Linga's father Laxman would take out of tourist to show them corals in the glass bottomed boats that belonged to Nagar Biswas. Even though he could not speak Hindi very well, he knew the names of most of the corals, and knew exactly where they could be found. As a result, Mr. Biswas would always want him to take the tourists out. When he first came to Neil Island, Laxman would also go diving, using a sharp spear to hunt fish that swam amongst the corals.

When he was in Class 6, Linga took his father's snorkel and spear and went diving all by himself. Of course, when his parents found out, they were very angry with him and took away the snorkel and threw away the spear. Unknown to them, Linga found the spear and hid it in the cow shed.

Linga had not forgotten the pleasure of secretly going diving in the sea to look a corals. So whenever his parents would go to collect vegetables at Bharatpur of Ramnagar, he would quietly take the snorkel and the spear, walk through the undergrowth towards the sea, and dive in, often going quite far out into the open ocean. He would always return before his parents were back, hide the spear and the snorkel, have a bath and be at home looking innocent!

One Sunday afternoon, Linga's parents and sisters had gone to Bharatpur. Taking his chance, Linga grabbed the snorkel in one hand and the spear in another and ran through the coconut grove. He knew this opportunity might not come again, so in the middle of the afternoon, he reached the Laxmanpur beach. Without wasting anytime he walked to the



sea, cleaning his snorkels with his spit before putting them on.

Swimming along, he reached his favorite patch of red corals. Almost immediately a shoal of colorful fish emerged from behind the reef, swimming around him. To Linga this was a completely different world, an experience of different colors. He had never seen anything like this on land. He watched the fish unblinkingly.

A thousand questions crowded his mind...are the corals plants or animals? How long do they live? Do they eat anything? His father had said that they were coloured stones.

Linga was shaken out of his thoughts....there was a large grey creature swimming towards him. He dropped the spear, his body stiffed with fear. What is this animal? Will it eat him? What was this peculiar creature looking for with its face turned toward the sea floor?

Linga swam as fast as he could to reach the shore, unmindful of the cuts he received because of the corals.

His mother's call brought Linga back to the present. The aroma of the treats his mother had made for Makar Sankranti reached his nose, making him very hungry. While eating the food, he remembered that he had to ask his parents about what they knew about dugongs. Linga finished his meal, washed his hands and approached his father.

"Naina," he began, "a few ma'ams and a sir from NGO in Chennai came to our school. They showed us a film on the dugongs and told us many things about it. They told us to ask our parents what they knew about the dugong"

"What can I say about the water hogs?" his father said abruptly.



"Don't call them that. Why don't you call them Dugong?" said Linga.

Linga's father kept quiet. He holds out bakar leaves to the goats which they immediately and with great relish. "Just a few years back," he said, "during winter time, a dugong's bloody carcass was found on Beach. Maybe some poacher had cut it open to use its flesh as bait. Go to bed now, it is late. And before going to school, tie the cow in the field so it can graze."

Linga twisted and turned through the night. Will the poachers attack his friend too?

In the morning before school, Linga told Krishna about the dugong that he had seen and how he was somehow sure it was a peaceful creature, despite the scare it has given him. Krishna was at first startled, but then told Linga about a story that his grandfather had told him....about the water nymph- a creature that looks like fairies, but the lower half of its body was like a fish, somewhat similar to the Dugong!

"When did you see it again? Did you go swimming?" asked Krishna.

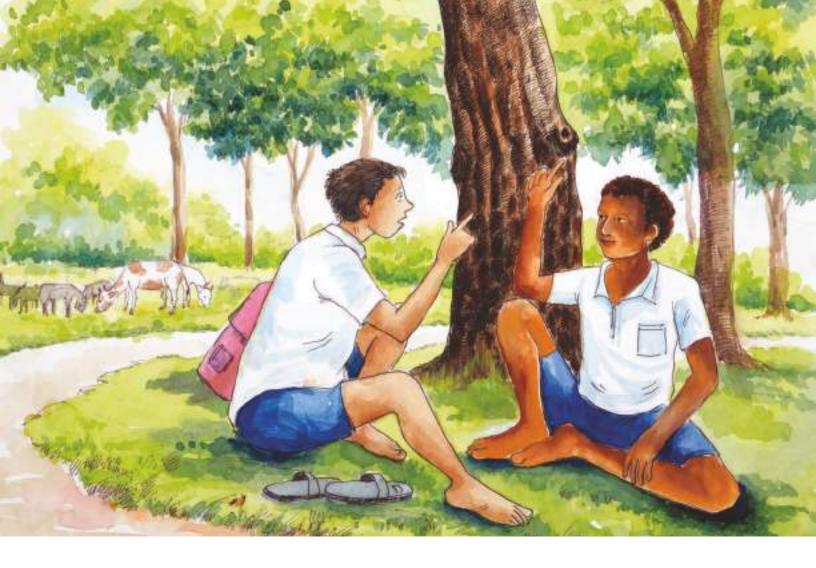
"No, I took my uncles small dungi. I used bamboo poles to push it forward." replied Linga.

"What happened then?" Krishna asked eagerly.

"I went up and down that area where I had first spotted it, but could see nothing. Disappointed, I was about to return, but suddenly my dungi swayed. I looked on either side, but could see nothing. Then the dungi swayed again! Learning over the side, I saw a large animal moving around the dungi, looking for the grass that grows on the sea floor. At regular intervals it was coming out of the water. I realized that was certainly not a water nymph and also very peaceable. That day I did nothing but observed its movements."

"I must say, you are very brave," said Krishna, his voice full of admiration.

"That day, I didn't tell my parents anything, but in the evening, I told my uncle. He said he knew about this creature and had seen it many a time. I did not believe him and told him I would take him to the place where I had seen the dugong," said Linga.



"Did you?" asked Krishna.

"Yes. While in the dungi, I had placed my hand in the water. Nothing happened for awhile, and I dozed off. Suddenly I felt something touch my finger. Startled, I sat up and looked into the water. The dugong was very near me, at times coming near the surface and then diving back into the water, taking its time."

### "Did you touch it?"

"Well at first I was a bit nervous about putting my hand into the water again, but then I did, and the dugong came up to me. Almost like he wanted to say hello to a friend! I didn't tell my uncle, but he suddenly went up, rocking the boat. Of course, the dugong must have got



scared, and left. Do you know, I actually missed the dugong, and kept wondering where it had gone."

It was the final day of the workshop. The students had a lot fun while learning so much about the dugongs. Today they had to share what they have learnt from the assignment of the previous day.

Vimla ma'am wished everyone good morning, and asked the group to share what they had learned. Immediately, there was a cacophony, with each on wanting to go first. After they had quitened down, Rajan sir said "I have seen that Linga has been very quiet the last few days, I think that he will share something today, am I right?"

At first, Linga felt a little awkward at being singled out like this, but felt braver when he saw the faces of his friends. After a short silence, Linga began to talk.

"When I asked my father about dugongs, he told me about an incident. Some greedy people catch Dugongs and kill them cruelly." The audience could feel the sorrow in Linga's voice and face.

"Like some others, my father saw the carcass of the dugong on beach. It seems that people ate the flesh of the animal and some used the flesh as bait for fish. Poachers also use the flesh to make oil." Linga's voice choked with emotion and he sat down after saying a quick thank you.

There is a deafening silence in the hall as the situation sinks in.

"What Linga says is correct," says Lokesh. "This happened at beach. I remember that my grandfather admonished the poachers vehemently."

"Yes," added Sabitri, "My mother says that the poachers have been arrested and punished."

The students all agreed that the killing of an innocent animal and the state animal of the Islands was a heinous act.

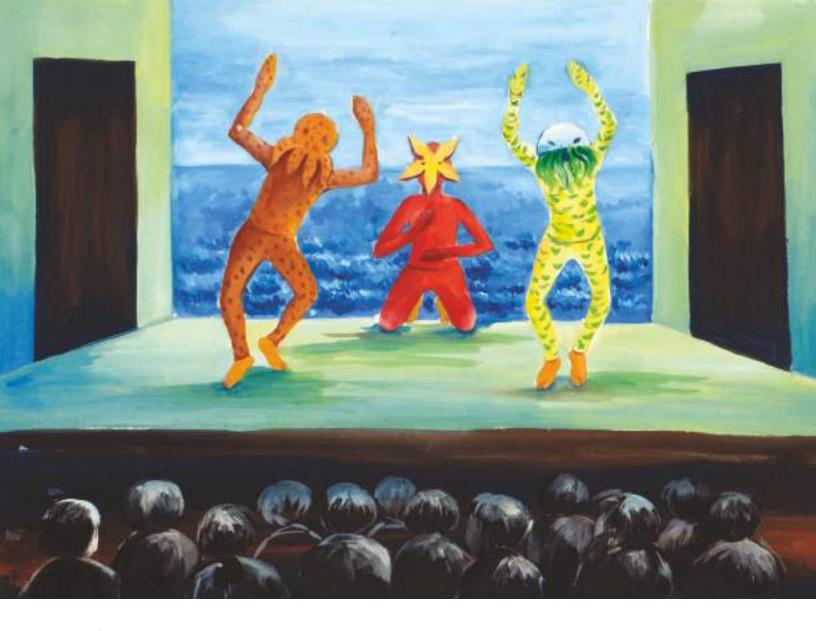
"You have developed awareness and a sense of responsibility, but that itself is not enough," said Rajan sir. "This has to spread to every person, everyone connected to the sea in some way or the another. This cruel practices has been continuing from ancient times, and is in fact, the livelihood for many people!"

While the discussion was going on, the principal of the school had come to the hall. He was impressed by his students and their participation and praised them, much to the joy of the students.

The day after was the valedictory function, the day the children would be able to present what they had done through the four days of the workshop and when the NGO would be felicitated. The poster drawn by the children were displayed and a hug banner was put up. Everyone helped set up for the program, including the teachers. The chief guest was the Assistant Conservator of Forest of Havelock. With him were the chief of the village Panchayat, the members of the Panchayat Samiti, Zilla Parishad and the parents of the participating students. The level of excitement in the school was like that of the day of Saraswati Puja!

Linga was standing behind the screen on the stage. His mind kept going back images of a dugong's carcass and his friend.

"What are you thinking of, standing there all by yourself? There isn't much time, learn go over the script once." said Krishna, nudging Linga sharply.



Shaken out of his reverie, Linga looks around him. His friends have finished their makeup and look ready for the performance. He was a bit nervous, as he had never participated in any school program on this scale before, other than the recitation of an odd poem.

"Don't be nervous just look ahead and you will be fine." said Krishna. Linga nodded his head, but stared straight ahead, as if in a trance.

"Our three day workshop was filled with activities to make the program worthwhile and of course, fun-filled. We showed the children and their teachers documentaries, encouraged the students to speak with fisherman and other who are directly connected to the sea, and also had poster making activities, so that the student could spread awareness about the marine life in the seas around the Andaman islands. The objective of today's program is to share how much the students have been able to appreciate and understand the importance of sea creatures, creating awareness amongst all of you, their parents and grandparents. Around 50 students from the secondary and middle section will present a skit for you, and I hope you will enjoy it said Vineeta ma'am.

The children had dressed up as colorful creatures of the sea. There were Jellyfish, Octopuses, Sea horse and Tuna fish. They sang in chorus:

"Under the blue sky, the blue water is our home.

We sing and smile while we move

When we see the big fish, we hide under the coral!"

They sang more songs, making it a carnival of fish on the stage! Then the dugong entered, and the fish and the dugong sang a song about the importance of the dugong in the food chain. The fish sang -

"Dugong, dugong is really good

Loves like a mother

Never chases anyone

Gives nutrition to others"



The dugong sang -

"Let me give you a warning Greedy sailors and illegal hunters Are sailing in the sea"

After the song was over, three poachers entered the stage, conspiring how to kill the poor dugong!

"Yesterday, I saw a water hog here, stop the boat and don't make any noise. The moment it comes to the surface we must throw the spear!" said one.

"You are right Madan, said the second hunter, I also saw it around this area. It has a lot of fat....we will get plenty of oil..."

The hunters raised their spears and as soon as they were going to throw them, the dugong transformed into Lord Krishna. Then Linga narrated the myth to the audience, where Lord Krishna in Dwarka turned every one of his cows into sea cows to keep them safe. The hunters begging for forgiveness from the god, immediately left.

All of a sudden, Linga stood up straight and looked directly at the audience, his voice louder and more confident than ever before. He told them about how poachers were hunting the state animal of the Islands, and how this illegal activity must be stopped before it is too late and the dugong becomes extinct. None of this was in the script whatever Linga said, he felt from the bottom of his heart. When he finished, a hush fell over the audience. Then, as the actors assembled on stage to take the bow they burst into thunderous applause.

After the program, Linga received a special honor for his heartfelt speech. His speech was praised by the Assistant Conservator. Rajan sir asked his friends why mentioned the dugong at all? His friends said that he had friendship with the Dugong, to him, the dugong was special. In the audience, Linga's parents could not hide their joy. They felt so proud of their son that tears rolled down their cheek.



The next day, clutching his prize, Linga went to the beach and looking out to the sea made a silent promise to the dugongs in the ocean his friend - "You have nothing to fear my friend, we will be there to protect you and we have so many people with us who will protect you for eternity. Live in peace my friend."

## **Dugong, My Friend**

#### Elrika D'Souza

tories about mermaids have always fascinated me as a child. Little did I Know that in a few years; I would be swimming with the dugong: the animal associated with these tales!

I had an opportunity to sight and spend hours snorkeling with this magnificent animal in the year 2007. Out in the shallow turquoise waters of Havelock Island, in the Ritchie's archipelago, the sight of this 300-400 kilogram 6 feet long beast initially brought about the feeling of fear. This was soon taken over by a comfort from the gentleness and calmness and the indifference of the feeding animal that we named Alpha, our first dugong. The initial excitement and the urge to swim with the animal were soon replaced by a curiosity while swimming almost six hours each day over three months.

The dugong is one of the many spectacular and elusive marine mammals inhabiting the waters of the Andaman and Nicobar archipelago. It is difficult to sight such an animal that surfaces to breath for only a few seconds once every five to seven minutes. The low visibility of the archipelago waters adds to this difficulty. We used alternative techniques like difficulty. We used alternative techniques like looking for the long serpentine feeding signs that the animal leaves behind in seagrass meadows to first ascertain the presence of the animal across the archipelago. Whenever we were lucky enough to sight the animal, we recorded its behavior. Feeding appeared to be the main activity of the animal as it requires to feed for long periods to meet its daily requirements from the small-sized seagrass species that it prefers.

Eight years of monitoring seagrass meadows by us and 'informants' from local communities resulted in the recording of fifteen dugongs in the wild. There is surely a possibility of sighting a few more animals. Our research over the years has shown that dugong in this archipelago feed mainly on seagrasses of the genus *Halodule* and *Halophila*, that are high in nitrogen and low in fiber, and require large continuous stretches of such meadows. The numbers have surely decreased over the past five decades, but these animals have continued to use the same seagrass meadows over the years (except for sites where there has been animal mortality). Within these areas the animal repeatedly forages almost continuously throughout the year.

Dugongs are the gardeners of the seagrass ecosystem. By their constant feeding, they help to increase the nutrient content of seagrasses and also maintain a meadow with species that a whole range of other animals depend on. We do not know completely about the consequences for the ecosystem if the dugong is eliminated. But what we do know is that every animal in an ecosystem has a role to play, even if that role is not entirely understood by us humans. These roles may be directly, indirectly or not at all beneficial to mankind, but certainly beneficial to some little creature that is part of that ecosystem. Often, it just helps to conserve a species rather than lamenting once the species has gone extinct.

Elrika D'Souza is a Research Associate at the Nature Conservation Foundation, Mysore. Her team has been studying the dugong population of the Andaman and Nicobar archipelago for the past twelve years. Together with the Department of Environment and Forests, Port Blair, they are developing ways to monitor and protect the remaining population of dugongs and their habitat across the island archipelago.

#### **GLOSSARY**

**Coral -** A simple animal attached to the seabed that many people think are plants or rocks, because of their appearance. These animals are responsible for building coral reefs. They provide homes and living space (habitats) for the hundreds of thousands of other species that lives in coral reef ecosystems. Corals can only survive in waters that have a particular temperature range. If waters become too warm, then corals cannot survive.

**Corals in the Andaman and Nicobar Islands -** Over 300 species of corals are found in the waters that surround the Andaman and Nicobar Islands. These can be seen while snorkelling or scuba diving, and even while walking along the jetty at Havelock.

**Dolphins -** Dolphins are marine mammals. They eat mostly fish and squid, and are regarded as highly intelligent animals. They are also highly social animals.

**Ecology -** This is a branch of science that deals with the interactions and relationships between organisms and the environment.

**Ecosystem -** Different forms of living things existing together and interacting with non-living in the same environment forms an ecosystem.

**Food chain -** The link formed by producers and consumers through the chain of eating and being eaten. Interlinked food chains form food web

**The Gulf of Mannar -** The Gulf of Mannar is a large shallow bay in the Indian Ocean. It is known to harbor over 3,600 species of flora and fauna, making it one of the richest coastal regions in Asia. 117 hard coral species have been recorded in the Gulf of Mannar. Sea turtles are frequent visitors to the gulf as are sharks, dugongs and dolphins.

**The Gulf of Kutch -** Gulf of Kutch is an inlet of the Arabian Sea along the west coast of India, in the state of Gujarat. It is a region with highest potential of tidal energy generation. The first marine

national park of India is situated on the southern shore of the Gulf of Kutch in the Jamnagar district of Gujarat.

**Habitat -** Where an organism lives. It supplies shelter, food and water to the organism. The habitat of the dugong is the sea.

**Jellyfish -** Jellyfish live in the sea and found in all oceans and some live in fresh water. They can often be transparent or translucent consisting of umbrella-shaped bell and trailing tentacles. These tentacles have 'stinging' cells, so be careful when you see a jellyfish! Jellyfish eat plankton. Some sea turtles eat jellyfish.

**Long Island -** Also in the south Andaman, this small island has beautiful beaches and clean waters. There is one small village with narrow concrete footpaths. One of the loveliest beaches in the Andaman Islands, Lalaji Bay situated in Long Island. The scuba diving around Long Island is excellent.

**Makar Sankranti -** This festival marks the day when the sun begins its Northward journey and enters the sign of Makar (the Capricorn) from the Tropic of cancer. Other names for this festival include Pongal, Lohri, Uttarayan, Maghi, Bhogali Bihu and Poush Parbon.

**Neil Island -** An island in the south Andamans, Neil Island occupies an area of 18 sq.km,. It is apparently named after James Geroge Smith Neil, a British soldier. Agriculture is the primary occupation of the villagers. However now, an increasing number of tourists choose to visit Neil Island.

**Octopus -** These animals have eight tentacles. They can eject a blackish ink to distract their prey and are believed to be very intelligent.

**Radhanagar Beach -** It is situated 12 km from Havelock's ferry pier. The beach is undoubtedly one of the best beaches of the Andaman Islands. It has overall length of 2 kms and width of 30 - 40 meters. Radhanagar Beach has been awarded as one of "Asia's best beach" by the Time Megazine.

**Sea grass -** Sea grass are grass like flowering plant that live completely submerged in marine and estuarine waters. They are main diet of dugongs and green sea turtles and provide a habitat for many smaller animals. They also help keep the water clear.

**Strait Island -** Strait Island is a small, comma-shaped forested Island located east of Baratang Island. The settlement for the Great Andamanese, one of indigenous people of the Andaman Islands. There is school for children and small dispensary for primary health care.

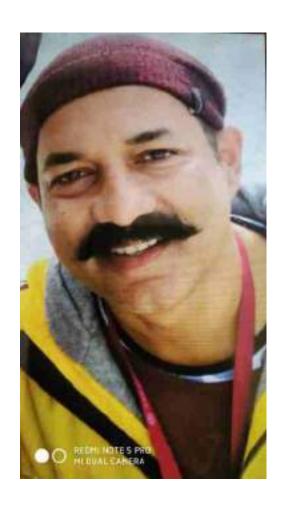
**Surmai -** It is very popular fish among countries of the Indian subcontinent. It is fairly expensive fish that is considered a delicacy in most places. They are found in warm shallow, coastal waters, adults of this species are found in coastal bays, harbours and deep lagoons.

**Tiger prawn -** Tiger prawn is a marine crustacean that is widely reared for food. They are most commonly found in estuaries (juveniles), marine (adults), lagoons and mangroves, inhabiting bottom mud and sand. The larvae of Tiger prawns move towards the coast, entering estuaries and mangrove swamps that serve as nursery grounds. They then migrate to deeper water when they become adolescent.

**Tuna Fish -** They are most commercially valuable fish. It is good source of vitamin B6 and phosphorus and a very good source of Protein, Niacin and low saturated fat. They can move at great speed through water.

**Mangroves-** A mangrove is a shrub or small tree that grows in coastal saline or brackish water. All of these grow in areas with low oxygen soil. Mangrove forests stabilize the coastline, reducing erosion from storm surges, waves & tides. The intricate root system of mangrove forest provide shelter from predators.

# **Authors biography**



Chanchal Singha Roy,a National Awardee and Air India BOLT (Broad Outlook for learner Teacher) Awardee Teacher of Andaman & Nicobar Islands,working in rural areas of Andaman Islands for more than two decades. He has used this opportunity to stay on the midst of nature and even go a step beyond. Driven by passion for nature, he works on spreading awareness and educate children and coastal communities with his voluntary initiative" COASTAL GREEN ZONE". Recently under his guidance; students of his school has won the National "WIPRO EARTHIAN AWARD" 2018.

