

# Research Report On Cleaning up of Saint Martin Coral Island

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## **1. Saint Martin: The beauty over and underneath**

Bangladesh does not have any mountains. Neither has it felt the wave of a deep blue ocean, the adventure in the middle of a burning desert nor snow white peaks to ski or jump off. The country in the south most corner of Asia really has very few things for its beauty hungry people to be proud of. Among those very few destinations Bangladesh can get a hype of adventure and glimpse of abundance offered by mother-nature is the longest beach in the world Cox's Bazaar and to its south Saint Martins, a little island made of corals.

St. Martin's is a small island in the northeast part of the Bay of Bengal, about 9 km south of the tip of the Cox's Bazar-Teknaf peninsula, and forming the southernmost part of Bangladesh. It is the only coral island in Bangladesh. It is about 8 km west of the northwest coast of Myanmar at the mouth of the Naf River. The local name of the island is "Narical Gingira", translated from Bangla, meaning 'Coconut Island'. The surrounding coral reef of the island has an extension named Chera Dwip.

People who have quest for adventure, thirst for god gifted nature and love for diversified life-forms visit Saint Martin's atleast once in a lifetime if not every year. It has greens of coconut bunches, modest waves of bay-beaches, rainbowful colors in sea-fishes and unrevealed mystery underneath the coral life.

But how is Saint Martins these days? Though viewed, toured and extracted by millions, the little island is dying unattended and uncared!

## **2. Biodiversity**

St. Martin's island is endowed with vast marine and land resources having a global biodiversity significance. The island is a good example of co-occurrence of corals, algae, sea weeds, grasses and mangroves. It contains some of the most unique, but thus far not studied benthic community association in Bangladesh, in fact not found any where else in the South Asia region.

It has been known from a study by Canadian coral biologist Dr. T. Tomasik in 1997 that notably the rocky sub-tidal habitat from the seaward margin to about 1000m offshore supports a diverse coral community represented by approximately 66 Scleractinian coral species, of which 19 are fossil corals, 36 are living corals and the rest are under families of subclass Octocorallia (11 species of soft corals).

A total of 234 species of fish have been recorded from the coastal water of St. Martin's Island, of which 16 are fresh water species. Among the fish species, 89 are coral associated. The most abundant coral or reef associated fish are Damsel, Parrot, Surgeon, Groupers, Snappers, Emperors and Butterfly fish. The mollusk on the St. Martin's is the largest and most beautiful in Bangladesh. 186 species of mollusk & oyster, 7 species of crab, 9 species of echinoderms, 4 species of sea urchin, 1 species of sea cucumber & some brittle stars were reported. A number of colorful nudibranch and Bryozoans were reported in adjacent area of the island.

There are confirmed records of 5 species of marine mammals in the sea surrounding the St. Martin's Island as well as Bay of Bengal which are globally threatened according to the IUCN Red data book. The island has its fame as an important nesting ground for 3 marine turtles, including Olive ridly, all of them are considered as globally endangered by IUCN. So far, 14 species of algae have been recorded from the St. Martin's Island. There is an estimated amount of 1500 MT red sea weeds available around St. Martin's Island. 29 reptilian species have been recorded from the island, of them 11 are locally threatened. 120 species of birds have been reported from the island of which 67 species are resident and 53 migratory, many of them are in threatened list of IUCN. The economy of the local people of the island is based mainly on fishery. It is estimated that 1650 MT of fish are caught annually from the waters adjacent to this island.

### **3. The Six Month Economy**

Every year, the island is attracting more and more visitors from home and abroad. Tourism is thriving in this island. More than five thousand tourists now visit the island every day.

For six months of the year, for three hours a day, more than four or five steamers laden with tourists descend on the island. Officially the figure is about three thousand, but unofficially it is a lot more, since many come on private trawlers and boats as well.

It is the major earning source of the people who lives there irrespective of poor or rich. During this season millions of taka evolves around that tiny economy. MRDI survey found it's a spill over effect as almost all the people in saint martins are above the poverty line. (Table: 1) Very few who are immigrated and landless involved in activities like illegal coral extraction and sales.

Almost quarter of earning people are engaged in small business who earn mostly during tourist season. (Table: 2) Even unemployed youths get involved in works like Van pulling and tourist related services. A big portion is depended on fisheries business as many of them also look forward for this tourist influx period for some extra income as they don't have to go fishing that time.

There are almost 50 hotels and residential cottages for tourist most of which are operated and owned by people from Dhaka or rich non residents. Still there are unemployed youth in almost 40% of households who can contribute a lot for the betterment of this island. (Table: 3)

### **4. The flipside**

It's a case for over extraction that is causing a gradual death of Saint Martin's, the resource that nature had provided to Bangladesh. There are nearly 7000 people on this small island of 12 sq. km. area. In tourist season (Nov.-Feb.) average 3000 people visit this island daily, which is beyond the holding capacity of this small marine island.

Besides this, there is regular big ferry services and engine boat, used for transportation of tourist, to the island. For this reason, a huge amount of crude oil, plastic and other

non-biodegradable waste are discharged in the marine water adjacent to the island. In addition huge amounts of untreated market and domestic wastes, which include sewage matters (only 5% of the local people have sanitary latrine facilities) from the local people and tourists, are discharged into the adjacent coastal water. Thus the quality of coastal water is degrading gradually.

In 2005, government declared Saint Martin's as an environmentally endangered zone. Any kind of new construction using bricks and iron was banned. But ignoring the ban, people continued to build structures. Residential houses were turned into hotels, rest houses or cottages to accommodate increasing number of visitors.

Now the island has at least 52 structures without proper sanitation system. Saint Martin's has become dirty over the years. Mosquitoes and flies are increasing rapidly.

Even the nesting turtles are sometimes taken for food, and their hatchlings are often distracted by the twinkling lights along the beach. Species of fish, a few just recently discovered, are being over fished. Every year the fishermen must venture further out to sea to get their catch. Most of them use motorless boats.

At high tide the island is about 3 miles around, and pinched in the middle. The island exists only because of its coral base, so removal of that coral risks erosion of the beaches. St. Martins has lost roughly 25% of its coral reef in the past 7 years.

## **5. Who, how and why pollutes**

Fro the last few years St. Martin's Island, the only coral-bearing island in Bangladesh, has been facing an ecological disaster due to excessive tourism. Even the very existence of this newly born island, which is at most 150 years old, and small in size, is under threat from unlimited and eco-unfriendly tourism activities.

The fragile eco-system of St. Martin's Island cannot sustain such mass tourism; the island is suitable only for sustainable and responsible tourism.

With the onslaught of mass tourism, sewage and waste disposal in the island are placing heavy burden on the island. The tourist hotel built at the west beach has connected its sewage line to the seawater, which contaminates the ground water and adversely affect the bio-diversity of the island.

The collection of corals and shells as souvenirs by the tourists is posing a threat to coral colonies of the island. The disposal of plastic materials like poly-bags, plastic bottles etc by tourists on the island are harmful for the corals.

Hotels on the islands are making lighting hazard in the nearby sandy beach, which was previously used as a nesting ground by the turtles. It is reported that these days turtles encountering disturbance by light go back without laying eggs. The tourist season and nesting season of turtle coincide with each other. Moreover, the tourists make noise and enjoy fire camping for fun at night thus disturbs the sea turtles.

Numerous engine-driven boats bring tourists to the island. The discharge of pollutants such as oil, exhausts from these boats near coral sanctuary areas is causing irreparable harm to the corals. Tourist boats anchoring at the island cause direct damage to the boulder reef.

Investigation of MRDI says two-third of the people of Saint Martin's think the island is now in a great danger (Table: 13). Seventy-five percent of them think coral varieties are just vanishing day by day (Table: 7). To them tourist thrown waste are the number one reason of pollution in the island. A very near but second reason is Hotel waste and Sewerage, number three Extracting coral from water and finally Local Inhabitants waste and Sewerage. (Table: 8)

## **6. Green World: The success story**

Under the leadership of one Hedaitul Islam Helal and with the sponsorship of Banglalink, for the past few years, Cox's Bazar has been cleaned by a team of young boys and poor women. The project started in 2005 and has been a great success so far.

The average day for these cleaners begins at around 6:00 or 6:30 am when they first come onto the beach. They stay on the beach and clean it till 10:00. Then they get a break till 3:30 in the afternoon when they start their second shift which ends roughly at 5:00 or 5:30 pm. In between shifts they get time off and given basic lesson in reading and writing. Currently he has 17 youngsters between the ages of 14 to 19 but seemingly almost every day dozens of children ask if they can join the squad.

Helal sent in a proposal to Banglalink a few years ago, and it was all quite simple if they would fund him in keeping the beach clean and much to his surprise they jumped at the opportunity. Under the Cox's Bazar Beach Cleaning Project workers are paid for their food, lodging, clothes and medical expenses. Over and above that, Green World pay them Tk 1500 a month.

Green World started a similar project in Saint Martin Island too. But that failed due to lack of fund. Few barren dustbin and frame left by them, still calls for a need to spread the message of cleanliness and protect our beaches.

### **And a case of failure:**

A similar project is being run in Saint Martin's island from the same year Green world started working in Coxsbazar. The Department of Environment and an NGO are running this project named `Bangladesh POUSH' for these long years. So far they spent more than 25 crore taka. A three-storied building has been constructed under this project. People are trained on how to make fertilizer from waste. The project aims to make people aware about pollution. But the end result is frustrating. The island remains dirty. The project failed to keep the environment protected and clean.

The project started well in 2005. It became popular among the island people. People loved the workers. People called them "Poribesh" that means "Environment." Though

started with a vision to attain four targets like capacity building, awareness building, habitat restoration, sustainable livelihood, within three years hopes faded.

But what went wrong? Local Environment Club Secretary Nurul Alam Arman says in a focus group discussion with MRDI, “They have started working for environment of the island. But they didn’t coordinate with us. They didn’t sit with us to take a decision. Locals sometimes become aggrieved by their campaign. That is why there is a gap between them and the locals. It’s essential to involve local people. If it can be done, the island’s environment will definitely improve.”

Dr. Ainun Nishat expresses concern saying that we are destroying this island simply because we don’t care. His urge is to involve the local people in the initiative and make them aware that they will ultimately benefit. He says, if we are willing to save the island. If they are convinced, they will come forward to preserve environment of Saint Martin’s.

## **7. Stakeholders View:**

During this research MRDI conducted two focus group discussions in saint martin’s island to have a clear view of local peoples perception about problems and solutions. Unanimously they have identified few points.

### **Problems**

- Unclean, dirty beach
- Illegal procurement and trading of coral
- Polluted environment
- Crisis of water

### **Reasons:**

- Poverty and seasonal unemployment lead a section of people to coral robbery and unfair trade. These people are fishermen by profession. Thousands of tourists visit the island during November - March period. This period is also a dull season for fishing. So they look for alternative livelihood options. One section of the fisherman community gets involved in illegal procurement and trading of coral, knowingly or unknowingly.
- Huge numbers of tourists make the beach dirty and pollute the island as a whole.
- Indiscriminate felling of trees has increased average temperature of the island causing higher tide.
- Multi-storied hotels consume huge amount of water and dispose waste in an unplanned way. This causes water crisis and environmental pollution.
- The island is ignored by the administration.

### **Recommendations:**

- About 100 families of the island are involved in the process of direct extraction of coral from the sea and selling those to the tourists. They earn Taka 3000 to 4000 per month. If alternative work options can be created for them, they will refrain from this illegal act.
- These people can be involved in beach cleaning activities during the tourist season. They can live on fishing during the remaining months of the year.

- This island is based on a rock. Rains during the monsoon form the ground water which is pumped out and consumed by people throughout the year. This limited amount of water cannot meet the demand of people including huge number of tourists. So measures need to be taken to preserve rain water in reservoirs.
- Plantation and maintenance of trees around the island can prevent pollution of the island. Unemployed young people can be involved in the activity.
- Strong awareness campaigns among the tourists and local people are necessary. Leaflet with relevant messages can be distributed in the tourist ships.
- Waste management plant has to be established in the island.
- Establishing of a water desalination plant can also be considered.
- The island cleaning project has to be designed and implemented under the supervision of the Union Parisad.
- Project workers will be recruited in consultation with local people.
- To restrict use of plastic bottles, a water desalination plant can be set up in the island.

#### **8. Proposal: For a two pronged Approach:**

Take it or not, the coral island Saint Martin's needs cleaning. A very similar approach like Green World that is effective in Cox'sbazar can be replicated there easily. Such project can cost 4 million taka more or less, which is less than yearly CSR budget of most companies.

For geographic reasons, reality of Saint Martin's island is different then Cox'sbazar. The cleaning activities are worthwhile during October to March tourist season. The rest 6 months workers involved in such project can be trained in income generating activities like making handicrafts and items that can attract and be sold to tourists during season, as suggested by the local community.

There is a need for awareness in all level of Saint Martin's population about protecting this island. Cleaning workers can educate and train school kids and women in the lean season which can ultimately lead to a people driven environment protection and management system in that society.

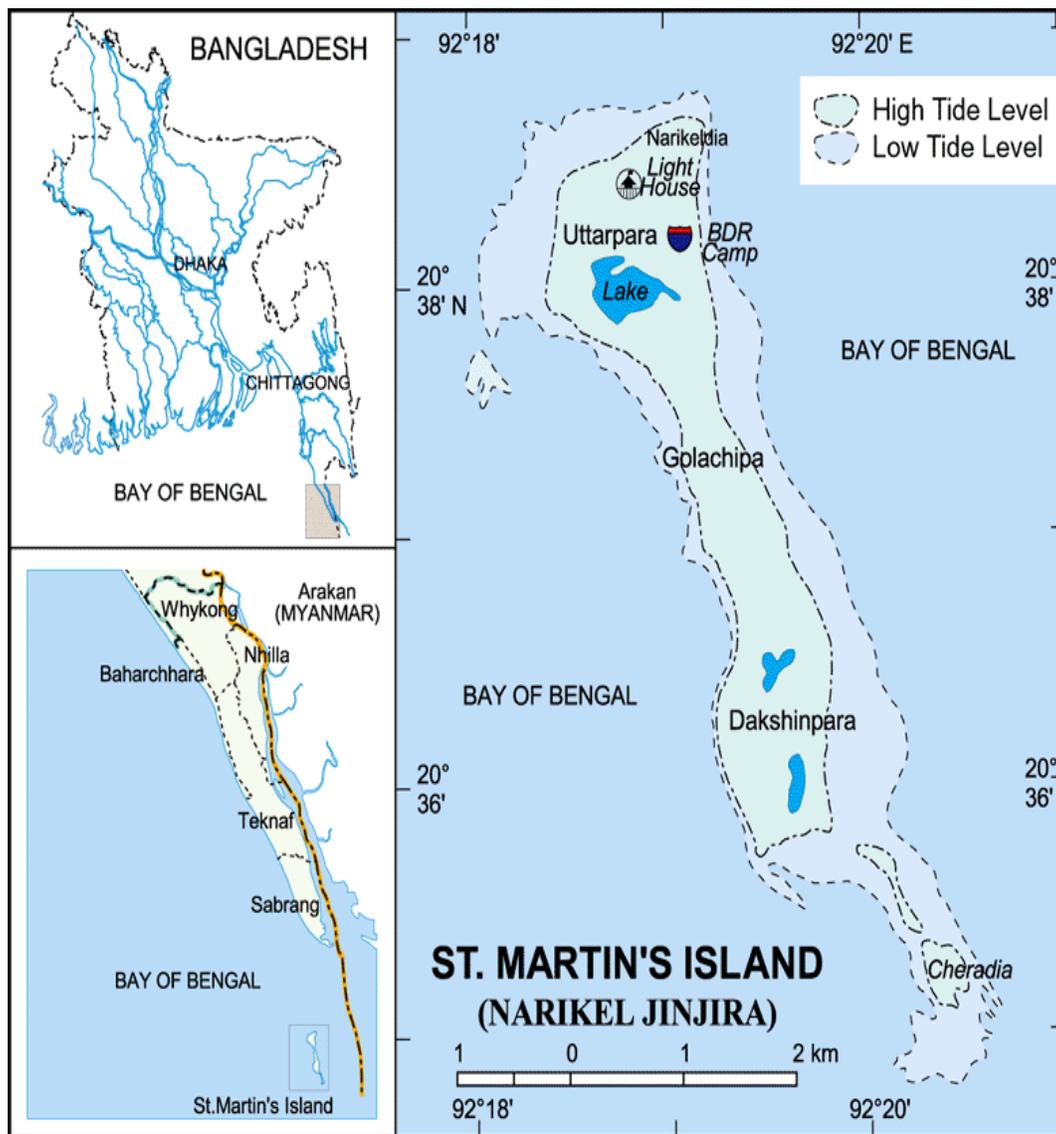
#### **9. A call of Duty and Responsibility:**

But who would shoulder the responsibility to save Saint Martin's from these man made disasters? As says Dr. Nishat, "We need to have a sound eco-tourism management. This will definitely attract tourists. We can set up some trails -- one or two visitors' centers - and towers. Then more people will come. The big companies can take such initiative as part of their corporate social and environmental responsibility. This will help their marketing, improve their image. The companies must involve local people -- create some scopes of employment generation. Government alone cannot do everything. It will be good if business houses work with the government as part of their CSR program. But every initiative must be sustainable to bring lasting benefit for their people."

Even Local community is also awaiting helping hands that they can tie their hand with. As Chairman of the union Mawlana Firoz Ahmed says in the FGD, "Hundreds of people of

this island are unemployed. They are forced to collect corals and sell them to earn their living. These people could be engaged in the beach cleaning work. This will create job opportunity for them. Then they will stop destroying the corals. We need to plant more trees here. This will help bring back the beauty of the island. This is not a call of us who live here; indeed it's a call of time now”

### Map of Saint Martin



## Annexure: 1

Proposed budget for the proposed project

### A. Beach cleaning

Infrastructural Cost				
Serial no	Item	No. of unit	Unit cost	Cost in TK
1.1	Office rent	12 months	20,000	240,000
1.3	Furniture and maintenance	1 year	60,000	60,000
<b>Sub Total</b>				<b>300,000</b>
*Equipments				
Serial no	Item	No. of unit	Unit cost	Cost in TK
2.1	Leaflets and printed materials		10,000*12	120, 000
2.2	Dustbin Frame	50	3000	150, 000
2.3	Frame maintenance	50	500	25, 000
2.4	Plastic bin	(50*2)=100	3200	320, 000
2.5	Stand Signboard	50	300	15, 000
2.6	Rickshaw Van	1	11, 000	11, 000
2.7	Van Maintenance		500*12	6, 000
2.8	Rental Cart	1	60	21, 600
2.9	Spade	4	250	1, 000
2.10	Shovel	4	250	1, 000
2.11	Bucket	60	145	8, 800
<b>Sub Total</b>				<b>06,69,400</b>
Human Resource				
Serial No	Designation	Quantity	Monthly salary	Yearly Cost with bonus
3.1	Project Director	1	10, 500	147, 000
3.2	Accountant	1	6, 500	91, 000
3.3	Supervisor	1	4, 500	63, 000
3.4	Cleaner	33	1, 500	693, 000
<b>Sub Total</b>				<b>09, 94, 000</b>
Other Cost				
Serial No	Item	Quantity	Monthly Cost	Yearly Cost
4.1	Food		38, 000	456, 000
4.2	Medical		1, 000	12, 000
<b>Sub Total</b>				<b>04, 68, 000</b>
<b>Total Cost For First year: 2,431,400 BDT</b>				
<b>Total: Twenty four lac thirty one thousand and four hundred Taka only</b>				

**B. Re-excavation of 10 existing ponds for rain water preservation:**

Taka 150,000 x 10= 1,500,000

**C. Solid waste treatment plant: Taka 600,000**

Grand total for the first year of the proposed intervention

**Taka 4,531,400**

Note: Cost of desalination plant is not included in the budget.

**Budget for beach cleaning plan for a longer period:**

Cost	1 year	5 year	10 year
Infrastructural	300,000	1,500,000	3,000,000
Equipments	6,69,400	3,347,000	6,694,000
Human Resource	9,94,000	4,970,000	9,940,000
Other	4,68,000	2,340,000	4,680,000
<b>Total</b>	<b>2,431,400</b>	<b>12,157,000</b>	<b>24,314,000</b>
<b>Total Cost For 10 year of Project: 24, 314, 000/= BDT</b>			
<b>Grand Total: Two crore forty three lac and fourteen thousand Taka only</b>			

*i.e. Costs may change due to increase in equipment prices and salaries of employees.*

\* Equipment budget considers new equipments for every 6 (six) months.

## Annexure: 2

Table- 1: Monthly Income of household

Range	Total respondent
Below 2100	2
Between 2100 to 4200	18
Between 4200 to 10000	12
10,000+	4
<b>Total</b>	<b>37</b>

Table - 2: Occupation

Types of occupation	Total respondent	Percentage
Small Business	10	25
Tourist related	1	2.5
Self Employed	9	22.5
Wage Earner	5	12.5
Day Laborer	4	10
Agriculture	5	12.5
Unemployed	1	2.5
Other	5	12.5
<b>Total</b>	<b>40</b>	<b>100</b>

Table - 3: Unemployed member in the family (16-35 yrs)

Response	Total respondent	Percentage
Nil	16	40
1	15	37.5
2	8	20
3	1	2.5
3+	0	0
<b>Total</b>	<b>40</b>	<b>100</b>

**Table - 4: Household**

Type of household	Total respondent	Percentage
Land Owner	29	72.5
Landless	8	20
Seasonal	2	5
Rent	1	2.5
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 5: Whether they prefer a job in the locality**

Response	Total respondent	Percentage
Yes, better if in Saint Martin	32	80
No, better if outside like Dhaka or in a city	8	20
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 6: Does beach and water need cleaning**

Response	Total respondent	Percentage
Yes	39	97.5
No	1	2.5
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 7: Situation of Coral**

Response	Total respondent	Percentage
Endangered	31	77.5
Not Endangered but in trouble	7	17.5
Fine	2	5
Don't know	0	0
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 8: Main Causes of Pollution**

<b>Response</b>	<b>Prioritized</b>
Tourist thrown waste	1
Hotel waste and Sewerage	2
Extracting coral from water	3
Local Inhabitants waste and Sewerage	4
No man made cause... water itself is polluted	5

**Table- 9: Any initiative available for protecting coral life?**

<b>Response</b>	<b>Total respondent</b>	<b>Percentage</b>
Yes	17	42.5
No	20	50
Don't know	3	7.5
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 10: Current initiatives enough to protect Saint Martin**

<b>Response</b>	<b>Total respondent</b>	<b>Percentage</b>
Yes	3	7.5
No	37	92.5
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 11: Local participation in Environment protection needed**

<b>Response</b>	<b>Total respondent</b>	<b>Percentage</b>
Success impossible without Local participation	33	82.5
Its Important but not mandatory	5	12.5
Not needed	2	5
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 12: Will local people cooperate with such initiatives?**

<b>Response</b>	<b>Total respondent</b>	<b>Percentage</b>
Yes	40	100
No	0	0
<b>Total</b>	<b>40</b>	<b>100</b>

**Table- 13: Without intervention future of Saint Martin**

<b>Response</b>	<b>Total respondent</b>	<b>Percentage</b>
Vulnerable	27	67.5
Not Vulnerable but will lose tourist attraction	5	12.5
No problem at all	1	2.5
Not sure	7	17.5
<b>Total</b>	<b>40</b>	<b>100</b>

Annexure: 3



## Social Investigation on Development Intervention

Conducted by: Management and Resources Development Initiative (MRDI)

Supported by: Manusher Jonno Foundation (MJF)

সাক্ষাৎকারদাতার নাম: -----

গ্রামের নাম: -----

ইউনিয়ন/উপজেলা/জেলা: -----

তারিখ: -----

১. পরিবারের সদস্য সংখ্যা?

ক. ২      খ. ৩      গ. ৪      ঘ. ৫      ঙ. ৫+

২. মাসিক পারিবারিক আয়?

ক. ২১০০ টাকার কম      খ. ২১০০ থেকে ৪২০০  
গ. ৪২০০ থেকে ১০,০০০      ঘ. ১০,০০০+

৩. পেশা?

ক. ক্ষুদ্র ব্যবসা      খ. পর্যটন কেন্দ্রিক ব্যবসা  
গ. আত্ম কর্মসংস্থান      ঘ. চাকুরী  
ঙ. দিনমজুরী      চ. কৃষিকাজ  
ছ. বেকার      জ. অন্যান্য  
ঞ. অন্যান্য হলে কি

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৪. পরিবারের বেকার সদস্য সংখ্যা (১৬ থেকে ৩৫ বছরের মধ্যে):

ক. ০      খ. ১      গ. ২      ঘ. ৩      ঙ. ৩+

৫. পরিবারের শিক্ষার ধরন?

সদস্য	শিক্ষাগত যোগ্যতা	চাকুরীজীবী/বেকার	(পুরুষ/মহিলা)
১.			
২.			
৩.			
৪.			
৫.			
৬.			

৬. গৃহস্থালির ধরণ?

ক. জমির মালিক

খ. ভূমিহীন

গ. মৌসুমী/অভিবাসী (যারা শুধু পর্যটন মৌসুমে কাজের জন্য আসেন)

ঘ. ভাড়াটিয়া (এলাকায় বিভিন্ন কাজ বা চাকুরীতে নিয়োজিত)

ঘ. অন্যান্য -----

-----

(যদি ভূমির মালিক হন তাহলে ৭, ৮ ও ৯ নং প্রশ্নের উত্তর দিন)

৭. জমির মূল্য (প্রতি ডেসিমেল) কেমন?-----

৭.১ গত বছরের তুলনায় জমির দাম বেড়েছে

ক. দেড়গুন

খ. দ্বিগুন

গ. দ্বিগুনের বেশী

৮. জমির ভালো দাম পেলে আপনি কি বিক্রি করে অন্যত্র চলে যাবেন?

ক. হ্যাঁ

খ. না

৯. সেন্টমার্টিনে জমির ক্রেতা কারা?

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১০. আপনি কি এই এলাকাতে চাকরি করতে আগ্রহী অথবা আপনার পরিবারের বেকার সদস্য এখানেই চাকুরী করুক এটা চান?

- ক. হ্যাঁ, সেন্টমার্টিনে হলে ভালো হয়  
খ. না, ঢাকা কিংবা অন্য কোনো শহরে হলে করবো

১১. সেন্টমার্টিনের পরিবেশ এবং জীবনমানের ধরণ কেমন?

- ক. ভালো পরিবেশ, দূষিত নয়    খ. মোটামুটি    গ. দূষিত

১২. সৈকতের অবস্থা

- ক. পরিষ্কার-পরিচ্ছন্ন    খ. সহনীয়  
গ. নোংরা    ঘ. খুবই নোংরা

১৩. সাগরের পানির অবস্থা

- ক. পরিষ্কার    খ. সহনীয়    গ. নোংরা    ঘ. খুবই নোংরা

১৪. সাগর ও সৈকত পরিষ্কার-পরিচ্ছন্ন রাখা জরুরী?

- ক. হ্যাঁ    খ. না

১৫. প্রবালগুলোর অবস্থা কি?

- ক. বিপন্ন    খ. বিপন্ন নয় তবে আশঙ্কাজনক  
গ. চমৎকার    ঘ. জানা নেই

১৬. দূষণের প্রধান কারন (মানের ক্রমানুসারে ১, ২, ৩ . . . ইত্যাদি ক্রমিক দিন)

পর্যটকদের নিক্ষিপ্ত আবর্জনা

স্থানীয় অধিবাসীদের নিক্ষিপ্ত আবর্জনা ও মলমূত্র

হোটেলের বর্জ্য ও মলমূত্র

যথেষ্ট প্রবাল আহরণ

মনুষ্যসৃষ্ট কোনো কারন নয়, পানি এমনিতেই দূষিত

অন্যান্য -----  
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১৭. সৈকত ও পানি পরিস্কার-পরিচ্ছন্ন রাখার কোনো উদ্যোগ আছে? (থাকলে কি ধরনের উদ্যোগ, কারা পরিচালনা করছে)

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১৮. প্রবাল বৈচিত্র্য ও পানির নিচের পরিবেশ রক্ষায় কোনো উদ্যোগ আছে কি?

ক. হ্যাঁ                      খ. না                      গ. জানা নেই

উত্তর হ্যাঁ হলে বিস্তারিত বলুন

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১৯. সেন্ট মার্টিন রক্ষায় নেয়া চলমান উদ্যোগ সমূহ কি পর্যাপ্ত?

ক. হ্যাঁ                      খ. না

২০. এ ক্ষেত্রে আরো কি কি করা যেতে পারে?

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পরিবেশ রক্ষায় স্থানীয় অংশগ্রহণ প্রয়োজন আছে কি?

ক. স্থানীয় অংশগ্রহণ ছাড়া সাফল্য অসম্ভব

খ. স্থানীয় অংশগ্রহণ জরুরী তবে বাধ্যতামূলক নয়

গ. কোনো প্রয়োজন নেই

কেনো?

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২১. সাগর ও সৈকত পরিচ্ছন্ন রাখার উদ্যোগ নিয়ে কেউ এগিয়ে এলে কি স্থানীয় অধিবাসীরা সহায়তা করবে?

ক. হ্যাঁ

খ. না

২২. এ ধরনের প্রকল্প বাস্তবায়ন করতে গিয়ে কি কোনো জটিলতার সম্মুখীন হতে হতে পারে? (উদাহরণ: স্থানীয় রাজনীতি, আমলাতন্ত্র, প্রভাবশালী)

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২৩. এ ধরনের উদ্যোগ নেয়া হলে কি সফল পাওয়া যাবে?

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২৪. এখন যেভাবে চলছে, সেভাবেই চলতে থাকলে সেন্ট মার্টিনের ভবিষ্যত কি?

ক. ঝুঁকিপূর্ণ

খ. ঝুঁকিপূর্ণ নয় তবে পর্যটন কেন্দ্র হিসেবে ভবিষ্যত নষ্ট হতে পারে

গ. কোনো সমস্যা হবে না

ঘ. নিশ্চিতভাবে বলা যাচ্ছে না

সাক্ষাৎকার গ্রহনকারীর নাম:

স্বাক্ষর:

তারিখ:

*আপনাকে ধন্যবাদ*

জ্ঞাতব্য: এই জরিপে প্রদত্ত সকল তথ্য এবং আপনার নাম ও পরিচয়ের পূর্ণ গোপনীয়তা বজায় রাখতে এমআরডিআই অঙ্গীকারাবদ্ধ।