

# SOUVENIR

52<sup>nd</sup> Annual Conference  
Ophthalmological Society of Assam  
OSACON 2019



**Under Aegis of**  
**Guwahati Academy of Ophthalmology**

**Venue :**  
**Vivanta by Taj**  
**Guwahati, Assam**  
**16-17 November 2019**

**Editor**  
**Dr Madhurjya Gogoi**

# OSA Theme Song (Lyrics)...



অসতো মা সৎ গময়  
তমসো মা জ্যোতির্গময়  
মৃত্যোৰ্মা অমৃতং গময়  
তমসা নাশি পোহৰ বিচাৰি  
তোমাৰ বাবে তেওঁৰ বাবে  
দেশৰ বাবে দহৰ বাবে  
পোহৰ সেনানী যাওঁ আগুৱাই  
অসতো মা সৎ.....

.....  
মৃত্যোৰ্মা অমৃতং গময়

\*\*\*

সাতষষ্ঠিতেই সজালো মঞ্চ  
এন্ধাৰ পোহৰৰ বহিলো অংক  
জনগনকে দিলো সপোনৰে আশা  
বুজো আমি মাথো জ্যোতিৰে ভাষা  
তমসা নাশি পোহৰ.....  
অসতো মা.....  
.....অমৃতং গময়

\*\*\*\*\*

সীমনা ভেদি আগবাঢ়িছো আমি  
দেশে বিদেশে আমি বিলামে জ্যোতি  
সাতোভনী আমি যাওঁ আগুৱাই  
পোহৰৰে ফুল যাওঁ যে বিলাই  
তমসা নাশি পোহৰ....  
অসতো মা.....

.....অমৃতং গময়

Long live OSA

Long live OSA

Long live OSA

## Acknowledgements:

Ophthalmological Society of Assam gratefully acknowledges the team led by Dr Saurabh Kumar Bhuyan for successfully carrying out the very important responsibility of writing the OSA Theme song.....

1. সুৰকাৰ আলিম্পন চৌধুৰী,
2. গীতৰ ৰেকৰ্ডিঙত জড়িত গায়ক গায়িকা আৰু অন্যান্য,
3. ডা:ৰাজেন গগৈ,
4. ডা:নৰেশ্বৰ দত্ত,
5. ডা:নাৰায়ণ বৰদলৈ,
6. ডা:বিৰাজু জ্যোতি গোস্বামী,
7. ডা:শুভ্ৰকিংকৰ গোস্বামী,
8. ডা:মাধুৰ্য্য গগৈ ....

---এই সকলোৰে ওচৰত মই আজীৱন কৃতজ্ঞ হৈ ৰাম এই অভাজনৰ ওপৰত ইমানখিনি বিশ্বাস ৰখাৰ বাবে। এই কৰ্মৰ বাবে মই নিজকে ধন্য মানিছো যিটো মোৰ চিৰজীৱনৰ এটি উল্লেখযোগ্য ঘটনা হিচাপে চিহ্নিত হৈ ৰাব।

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## **Editor**

Dr Madhurjya Gogoi

# Ophthalmological Society of Assam

Regd No: KAM(M)/240/A 23/273 of 2010-2011

Registration of Societies Act XXI of 1860, Validity extended upto 02.04.2022

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# SOUVENIR



## Local Organising Committee (LOC)

Under the aegis of

## Guwahati Academy of Ophthalmology

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OSACON 2019

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E-mail: [secretary@gao.org.in](mailto:secretary@gao.org.in)



## MESSAGE

### Chief Guest

### OSACON 2019



#### **Dr. Dipak Sarma**

MD. MRCP (IRELAND), MRCP (U.K.)  
FRCP (EDINBURGH-UK), FRCP (IRELAND)  
Fellow, Cardiology Society of India  
Fellow Indian Academy of Echocardiography  
Senior Consultant : Cardiology, Critical Care  
Jorhat Christian Medical Centre Hospital  
Jorhat - 785004, Assam, India  
E-mail : drdsjht@gmail.com

It gives me great pleasure to learn that the 52<sup>nd</sup> annual conference of the Ophthalmological Society of Assam is going to be held at Guwahati on 16<sup>th</sup> and 17<sup>th</sup> November 2019.

The contribution of Ophthalmological Society of Assam in its field is exemplary and well known to all. I am sure that the scientific deliberations in the conference will highlight the recent advances in the field of Ophthalmology which will benefit all the delegates and thereby the general public as a whole.

I wish the conference a grand success.

A handwritten signature in black ink, appearing to read 'D. Sarma'.

**Dr. Dipak Sarma**  
**Date : 02-11-2019**



## All India Ophthalmological Society

**Prof. (Dr.) Namrata Sharma**

MD, DNB, MNAMS

Hony. General Secretary

**All India Ophthalmological Society**

Professor, Cornea & Refractive Surgery Services  
Dr. Rajendra Prasad Centre for Ophthalmic Sciences,  
All India Institute of Medical Sciences,  
New Delhi-110029, India



31<sup>st</sup> October 2019

### Message

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Dr. Ajit Babu Majji

I am glad to learn that the Ophthalmological Society of Assam is holding its 52nd Annual Conference on 16th -17th November 2019 at Guwahati, Assam. A large no of ophthalmologists from Assam and different parts of East Zone of the country are participating in this programme.

I hope the presentations and deliberations of this conference would come out with useful tips and suggestions for those ophthalmologist colleagues who are engaged in ophthalmology programme and will help to strengthen the implementation of national programme for the control of blindness.

I wish all success and convey my felicitations and greetings to all the organizers and members of the Ophthalmological Society of Assam.



**Prof. (Dr.) Namrata Sharma**

Hony. General Secretary,

All India Ophthalmological Society

## Message



**Dr. Premeswar Nath**  
President  
Ophthalmological Society of Assam

I am happy that the Ophthalmological Society of Assam is holding its 52<sup>nd</sup> Annual Conference at Guwahati on 16<sup>th</sup>-17<sup>th</sup> November 2019.

Our esteemed Society was formed way back in 1967 at the initiative of Late Dr. L.C. Dutta, the father of Ophthalmology in North East India. The Society, the first of its kind in medical science in North East India, was named as All Assam Ophthalmological Society. For some technical reasons, the name was changed to Ophthalmological Society of Assam (OSA) in 2010-11. Initially started by only 16 members, our family is expanding over the years to register around 600 life members now.

Ophthalmological Society of Assam is holding scientific meets-annual conferences, midterm conferences and continued medical education of our fraternity. It is a matter of great honour of our society that our members have won numerous accolades in scientific session within and outside India.

The organising committee and some of our members have put in all efforts for overall success of the conference. The well planned scientific programs will have around twenty faculties of international repute from all over India as our resource persons. I take the opportunity to appeal to them to make the conference more useful scientifically. I hope our members will avail of the opportunity and enliven the programs by their active participation in the deliberations / interactions. I request all members not to shy away from approaching the experts.

I am really grateful to our members involved in organising the conference.

I wish the event a grand success.

*Premeswar Nath*

Dr. Premeswar Nath  
Guwahati

## **Dr. Nabajyoti Dutta**

President

Guwahati Academy of Ophthalmology



Greetings to all,

Guwahati Academy of Ophthalmology is indeed honoured to host the OSACON 2019, the Annual conference of Ophthalmological Society of Assam at Guwahati.

OSA has evolved and matured tremendously in the last few years with its members carving a niche for themselves in the national as well as international platform. This outstanding presence is a reflection of the dedication and the undying spirit of the younger generation with unflinching support from the seniors and faculties.

GAO, being an offshoot of OSA formed by the members residing in Guwahati has also made significant headway in the development of ophthalmic science in this region. The members of GAO with their untiring effort has risen to make this annual conference of OSA an occasion to cherish academically.

OSA members from various parts of the state and beyond will be accorded welcome in a warm way. The scientific sessions will be at par with any other prestigious national conferences. The gastronomic aspects will be taken care of to satisfy each and everyone. So in short it will be a feast for the eyes as well as the palate.

I welcome you all to the extravaganza and to take active part.  
Ensuring a healthy pulse of optimism for the future.

Regards,

**Dr. Nabajyoti Dutta**

**Dated 28<sup>th</sup> Oct 2019**



## MESSAGE

### **Prof. Dr. Dipali C. Deka**

Director & H.O.D.  
Regional Institute of Ophthalmology,  
Gauhati Medical College  
Guwahati-781032



It gives me great pleasure to welcome you all to Guwahati, the Gateway city of North-Eastern India, for the 52nd Annual Conference of the All Assam Ophthalmological Society.

We in Guwahati are happy that we are getting the chance to hold the annual conference so soon after we had the good fortune of having hosted the Gold Jubilee Celebration in 2017.

Guwahati being the hub of the North East India has come up as an apex medical hub in almost all medical & surgical disciplines including Ophthalmology. It has many advanced Eye Centres both under the Government as well as the private sector. Almost 30% of all Ophthalmologists of the Assam are practicing in and around Guwahati.

Several National stalwarts in Ophthalmology from all over India will be attending as guest speakers. So, we hope there will be a lot of meaningful interactions which will make it worthwhile for all the delegates.

Hence, I invite all the delegates to come and enjoy the conference and take part in the scientific deliberations and comradeship.

With best wishes

**Dr. Dipali C. Deka**



## MESSAGE

### **Dr. Rajendra Nath Gogoi**

Hony. General Secretary  
Ophthalmological Society of Assam



Greetings to all,

It gives me immense pleasure to communicate you while Ophthalmological Society of Assam is holding its 52<sup>nd</sup> Annual Conference ,OSACON 2019 at Hotel Vivanta by Taj, Guwahati. I on behalf of OSA welcome you all to this annual event which is being held in the beautiful capital city of Assam. After a successful OSACON 2018 held in Silchar Medical College, Silchar I am sure we are going to have another memorable conference here in Guwahati too, with a great dose of both academic and palatal feast.

We are happy to notice that the next gen young members are in forefront in organising this conference. This certainly a good trend in OSA that more and more young members are showing interest in organisational sector besides the academic activities. Sooner they take the batons from the seniors the better for our Society. As more interactive and practical oriented sessions are included in the scientific sessions, we believe the delegates will find them interesting. It has been decided to make inaugural function shorter from this conference onward to accommodate a longer General Body Meeting so that we have more time to discuss. We will be happy to see maximum members participating in the discussion.

Best wishes to all the guest and host faculties, delegates, co delegates and trade delegate and I believe you all will have great times here.

Wishing OSACON 2019 a great success..

Long Live Ophthalmological Society of Assam.

A handwritten signature in black ink on a white background, appearing to read 'Dr. Rajendra Nath Gogoi'.

(Dr. Rajendra Nath Gogoi)  
Hony General Secretary, OSA.



## MESSAGE



Warm greetings to all,

We on behalf of Guwahati Academy of Ophthalmology and the Local Organizing committee take the pleasure to welcome you all to the 52<sup>nd</sup> annual conference of Ophthalmological Society of Assam to be held on 16<sup>th</sup> and 17<sup>th</sup> November, 2019 at Vivanta by Taj, Guwahati. The annual conference of OSA provides a great platform for scientific, academic and social contribution. Delegates from all over Assam and other North Eastern states will be taking part in the conference.

We ardently hope that your scientific deliberations and enthusiastic participation will lead to the grand success of OSACON 2019.

Regards

**Dr Kruto Kalita**

Organizing Secretary

OSACON 2019



## From the Editor's desk

05 November 2019  
Guwahati, Assam



Greetings to all members and well wishers  
from Ophthalmological Society of Assam !

It is a matter of immense pride and privilege for the Local Organising Committee, constituted under the aegis of Gauhati Academy of Ophthalmology, to host the 52<sup>nd</sup> Annual Conference of OSA at Guwahati, 16-17 November, 2019.

The annual souvenir is an attempt to capture brief yet varied thoughts of our esteemed members that continue to provide refreshing perspectives of contemporary relevance. This souvenir includes an important milestone, namely, the lyrics of the theme song of OSA.

A shift has been made since 2017, when the Journal of Ophthalmological Society of Assam was launched, wherein articles of a purely scientific nature are being considered for our Journal only, and not the souvenir.

We gratefully acknowledge the contribution of authors, sponsors, office bearers, and towards advancement of the visual sciences. Any error is inadvertent, and we seek your indulgence for the same.

With best wishes for the success of the conference,

Dr Madhurjya Gogoi, MD (AIIMS)  
Editor, Souvenir, 2019  
Ophthalmological Society of Assam

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Facebook group 'Ophthalmological Society of Assam'



# Agony for training

***Dr Anubha Das***

I joined Rup Nath Brahma Civil Hospital Kokrajhar in January 1991 as Medical and Health Officer 1 after completion of Post Graduate Degree Course .At that time Kokrajhar was known for terrorist activities. When I went to the Secretariat for my place of posting ( I went to study on deputation ),the Deputy Secretary asked me where I wanted to work. I told him I was ready to work anywhere in Kokrajhar district. They were stunned by my answer. As Kokrajhar was a very disturbed district at that time (1991) most of the posts of Medical officers, in the district, were vacant. And all the doctors who were posted in Kokrajhar district tried to change their place of posting to some other district.

I was posted at RNB Civil Hospital Kokrajhar. As Medical and Health Officer 1, I had to do Emergency Duty. Most of the time I had to attend bullet injury, bomb blast injury, bow and arrow injury etc and those became a routine affair for me.

At that time (1991) I was doing ICCE in torchlight (no microscope) in OT and in camps in Schools and Primary Health Centers.

I had to send my performance report monthly to New Delhi and Guwahati (NPCB). During that time at frequent interval I used to get some queries from New Delhi ( NPCB ) regarding whether I was trained in ECCE, SICS etc. I used to fill up the form and send it expecting to get my chance for training in the near future.

Gradually everyone shifted from ICCE operation to ECCE with PCIOL. Then I had no option but to send my patients, who could afford, to Guwahati and Alipurduar. I continued to do ICCE to the remaining poor people.

In 2002 we got our operating microscope (Appaswamy). I was not trained to handle the microscope (I was the only Ophthalmologist of the district from 1993 to 2006). I went from pillar to the post for my training but in vain. I went to the Director of Health services twice. But there was no proper reply. I went to Director Regional Institute of Ophthalmology Dr Chiranjib Barua Sir. He gave me some hope. But nothing positive came out. I applied to the Aravind Eye Hospital Madurai for training. They refused saying that they have stopped the programme. But I did not lose my hope.

During my 5 days training at Rajendra Prasad Centre for Ophthalmology, New Delhi in 1998, I met a lady Ophthalmologist from Manipur. In the open session I had the opportunity to meet the Director Ophthalmology, the Secretary Ophthalmology and the Director RP Centre Prof V K Dada. The lady Ophthalmologist told me to write to the Director Ophthalmology (Dr Mrs Jose) for the training.

In 2003 December after I lost all my hope I remembered the saying of the lady Doctor from Manipur. I wrote to the Director saying that I was working in the most disturbed area of the state and had to treat more injury cases than Eye cases. I tried for training at Aravind Eye Hospital but they refused. So I need training urgently to treat my poor patients.

After writing the letter I had problem in writing the address. I wrote

To The Director General, Ophthalmology  
Nirman Bhaban  
New Delhi

I was not sure about the address. But to my surprise exactly after 12 days I got a reply. I received a Telegram (Nov 2003) informing me that I had been selected for training In ECCE with PCIOL at Aravind Eye Hospital Madurai (Institution of my choice) for 60 days from Feb 2004.

Training at Aravind Eye Hospital, Madurai was an eye opener for me and there was no looking back. After my training Prof Dr Chiranjib Barua sir sent Asst. Prof Dr Dipali Deka (my classmate and best friend) and Dr Prasanta to start ECCE with PCIOL operation at Kokrajhar. I am thankful to both of them and Barua Sir.

Being in one of the most disturbed district of Assam where few doctors dare to come we are serving to the best of our power and ability for prevention of blindness. Last year Kokrajhar district became the best performing district in cataract operation cases. Credit goes to young and energetic doctors working in our hospital Dr Jyotish Kumar Kalita and Dr Rajendra Kumar.

But all of it had a humble beginning.

---The author can be reached at 9435322535/9954321863 whatsapp.

\*\*\*\*\*

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# Two Choices

[ A true story as narrated to me by an acquaintance ]

Dr D. Choudhury

What would you do...you make the choice. Don't look for a punch line, there isn't one. Read it anyway. My question is: Would you have made the same choice?

At a fundraising dinner for a school that serves learning-disabled children, the father of one of the students delivered a speech that would never be forgotten by all who attended. After extolling the school and its dedicated staff, he offered a question: 'When not interfered with by outside influences, everything nature does is done with perfection. Yet my son, Shay, cannot learn things as other children do. He cannot understand things as other children do. Where is the natural order of things in my son?'

The audience was stilled by the query.

The father continued. 'I believe, that when a child like Shay, physically and mentally handicapped comes into the world, an opportunity to realize true human nature presents itself, and it comes in the way other people  
Treat that child.'

Then he told the following story:

Shay and his father had walked past a park where some boys Shay knew were playing baseball. Shay asked, 'Do you think they'll let me play?' Shay's father knew that most of the boys would not want someone like Shay on their team, but the father also understood that if his son were allowed to play, it would give him a much-needed sense of belonging and some confidence to be accepted by others in spite of his handicaps.

Shay's father approached one of the boys on the field and asked (not expecting much) if Shay could play. The boy looked around for guidance and said, 'We're losing by six runs and the game is in the last inning. I guess he can be on our team and we'll try to put him in to bat in later.'

Shay struggled over the team's bench and, with a broad smile, put on a team jersey and short. His Father watched with a small tear in his eye and warmth in his heart. The boys saw the father's joy at his son being accepted. In the bottom of the inning, Shay's team scored a few runs but was still behind by three. In the top of that innings, Shay put on a glove and played in the right field. Even though no hits came his way, he was obviously ecstatic just to be in the game and on the field, grinning from ear to ear as his father waved to him from the stands. In the bottom of the innings, Shay's team scored again. Now, with two outs and the bases loaded, the potential winning run was on base and Shay was scheduled to be next at bat.

At this juncture, do they let Shay bat and give away their chance to win the game? Surprisingly, Shay was given the bat. Everyone knew that a hit was all but impossible because Shay didn't even know how to hold the bat properly, much less connect with the ball.

However, as Shay stepped up to the plate, the pitcher, recognizing that the other team was putting winning aside for this moment in the Shay's life, moved in a few steps to lob the ball in softly so Shay could at least make contact. The first pitch came and Shay swung clumsily and missed. The pitcher again took a few steps forward to toss the ball softly towards Shay. As the pitch came in, Shay swung at the ball and hit a slow ground ball right back to the pitcher.

The game would now be over. The pitcher picked up the soft grounder and could have easily thrown the ball to the first baseman. Shay would have been out and that would have been the end of the instead, the pitcher threw the ball right over the first baseman's head, out of reach of all team mates.

Everyone from the stands and both teams

Started yelling, 'Shay, run to first / Run to first'. Never in his life had Shay ever run that far, but he made it to first base. He scampered down the baseline, wide-eyed and startled.



Everyone yelled, 'Run to second, Run to the second'. Catching his breath, Shay awkwardly ran towards second, gleaming and struggling to make it to the base. By the time Shay rounded towards second base, the right fielder had the ball... the smallest guy on their team who now had his first chance to be the hero for his team. He would have thrown the ball to the second-baseman for the tag, but he understood the pitcher's intentions so he, too, intentionally threw the ball high and far over the third-baseman's head. Shay ran toward third base deliriously as the runners ahead of him circled the bases towards home.

All were screaming, 'Shay, Shay, Shay, all the way Shay'.

Shay reached third base because the opposing shortstop ran to help him by turning him in the direction of third base, and shouted, 'Run to third Shay, run to third'.

As Shay rounded third, the boys from both teams, and the spectators, were on their feet screaming, 'Shay, run home, Shay ran home', stepped on the plate, and was cheered as the hero who hit the grand slam and won the game for his team.

'That day', said the father softly with tears now rolling down his face, 'the boys from both teams helped bring a pieces of true love and humanity into this world'.

Shay didn't make it to another summer. He died that winter, having never forgotten being the hero and making his father so happy and coming home and seeing his Mother tearfully embrace her little hero of the day.

#### AND NOW A LITTLE FOOTNOTE TO THIS STORY:

We all have thousands of opportunities every single day to help realize the 'natural order of things' So many seemingly trivial interactions between two people present us with a choice: " Do we pass along a little spark of love and humanity or do we pass up those opportunities and leave the world a little bit colder in the process"?

A wise man once said every society is judged by how it treats it's least fortunate amongst them

You now have two choices:

1. Forget

or

2. Narrate ??

May your day, be a Shay Day.

We all send thousands of jokes through the e-mail without a second thought, but when it comes to sending messages about life choices, people hesitate. The crude, vulgar, and often obscene pass freely through cyberspace, but public discussion about decency is too often suppressed in our schools and workplaces.

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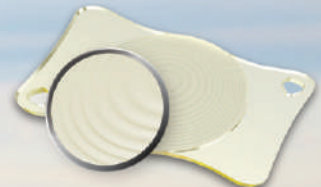
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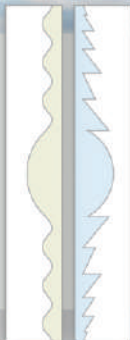
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# Myopia: more than a refractive error

Dr. K. Veena<sup>1</sup>, Dr. Iva R. Kalita<sup>2</sup>

## An Epidemic very near!

We are so aware of our general health nowadays. Everyone will agree how often we get patients who visit our clinic just to get their blood profiles checked voluntarily. Some comes because they have a family history, some comes because they are too lazy to workout but at the same time wants everything to be perfect in body, some comes because in past 1 month he/ she has not missed a single party, someone's grandparents or parent recently died of some cardiac attack, CVA, Diabetic renal failure etc. It's great to see the awareness around us. Really!

Is it so less important that we don't have that much level of awareness? It's time to accept the fact that Myopia/ near sightedness is spreading like epidemic and we're doing nothing to stop it from becoming a health hazard. Just treating it with glasses, sometimes even not getting perfect vision with maximum correction.

Proudly saying " My kid at this small age knows to play every recent games in phone/tabs/laptops/PS whether it be PUB-G, "He at 1 year age even knows how to unlock screen" is not smartness in us as a parent.

Later coming and worrying about his Glasses not being getting thin rather addition of Powers in every visit.

## **Yes! Myopia is spreading like an Epidemic now.**

According to the World Health Organization (WHO)-NPCB survey in 1989, 1.49% population in India is blind of which **7.35%** is due to refractive errors. The proportion of blindness due to refractive error increased to 19.7% in the NPCB-National Blindness Survey. The increase in the use of digital devices has also increased the number of myopia cases. This problem is more severe in India.<sup>1</sup> With more than 300 million smartphone users, India is one of the biggest electronic markets in the world. As per All India Institute of Medical Sciences, 13% of the school going population in India is myopic.<sup>2</sup>

## **Near Work**

Near work activities, such as reading, writing, and computer use, have been suggested to be possibly responsible for the remarkable increase in the prevalence of myopia. The odds of myopia increased by 2% for every 1 dioptre-hour more of near work per week.<sup>3</sup> Therefore, near work is a strong important risk factor of myopia. The severity of risk is according to the intensity, such as duration of continued reading and distance to the near objects.<sup>4</sup> Because near work is inevitable for learning, breaks of certain durations and preventing close reading may reduce the risk of near work.

## **Screens of Computers and Handheld Devices**

There has been a dramatic increase in the use of computers and mobile phones in recent years. Increased screen time may be associated with the

A Singapore poster encourages children to spend time outside to prevent myopia.

*Singapore National  
Myopia  
Programme/Health  
Promotion Board*



development of myopia.<sup>5</sup> Computer use induces asthenopia, but there is still no clear evidence of association with myopia development. Because of the long duration of looking at screens and blue light emission from LED screens, the risk of myopia development and blue light ocular hazards should be serious concerns, especially in children.<sup>6</sup>

### **Educational Stress**

In the urban, the educational system and stresses are different from the rural. Urban parents pay a lot of attention to the academic performance of children and encourage more time spent on near work. In contrast, rural parents pay more attention to physical education and encourage more outdoor activities. This difference might partly contribute to the high prevalence of myopia in the Urbans. Combined refractive error and myopia alone were higher in urban areas compared to rural areas in India (odds ratio [OR]: 2.27 and (OR: 2.12), respectively.<sup>7</sup> *Morgan and Rose*<sup>8</sup> proposed that the extensive use of after-school tutorials and increasing educational loads are associated with high prevalence rates of myopia.

### **Measures to stop Myopia becoming a Global burden:**

☐ **Prevention better than cure:** For non-myopic children, an annual cycloplegic refraction examination is suggested. Children should be encouraged to develop habits to reduce environmental risk factors, such as decreasing unnecessary near work or increasing near work breaks, and strengthen protective factors, such as daily outdoor activities up to 2 hours per day. By delaying myopia onset as late as possible to the end of adolescence, high myopia status should seldom occur in adulthood. A cluster-randomized, intervention-controlled study conducted by Knights Templar Eye Foundation “Sunlight exposure reduces Myopia in children” examined the effect of Sunlight Exposure reducing Myopia progression and was published in AAO, 2018.

☐ **Controlling Myopia progression:** A meta-analysis shows that only atropine or orthokeratology can significantly slow myopia progression.<sup>9</sup> For atropine treatment, the concern of phototoxicity from pupil dilation can be solved by using low-concentration atropine (0.5%, 0.1%, 0.01%) which achieves similar myopia-controlling effects as high concentrations.<sup>10</sup> For orthokeratology treatment, the greatest concern is microbial infection, inducing corneal ulcers. During initial wearing of the corneal reshaping lens, superficial keratitis is common. Frequent prompt follow-up and topical antibiotics are often necessary. Hygienic care of orthokeratology lenses and the storage case to decrease microbial load are important.<sup>11</sup>


**CONCLUSION:** Myopia is a global epidemic with projected prevalence to reach 52% by year 2050 (WHO data). Outdoor activity is a simple, free, and effective method to prevent myopia onset. Myopia is not just a commonplace vision defect. It is a significant risk factor for serious eye disease. We must therefore do everything possible to slow its progress and protect our children's vision and that means also reviewing their relationship with electronic devices.

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# Readymade artificial eye: devil in disguise

**JICO GOGOI**

Ocularist & Anaplastologist

Loss of an eye to disease or trauma (injury) is an unfortunate incident, with its implications beyond just the loss of vision. The continued dilemma of a painful disfigured eye and the social stigma attached, leads to huge psychological sufferings for the patient.

There are two types of artificial eye that can be fitted in these kinds of patients:

1. Readymade artificial eye/stock eyes:

They are made from low grade plastics. They are deeply concave at the back, which allows socket secretion like tear debris and foreign body to pool and stagnate in the spaces between the back of the prosthesis and orbital tissue. This is the main reason that leads to tissue lesions in the socket. Movement of the eye is minimal.

2. Custom design ocular prosthesis (COP) :

It is a medical and cosmesis device made of medical grade, highly bio-inert material. It gives similar appearance as compared to the fallow eye for maintaining facial symmetry. It is made by taking proper measurement of the space in the socket and hence there is no gap for fluid accumulation. It is fitted over a damaged, disfigured eye or after evisceration/enucleation of the eye. Movements are adequate.

A properly fitted and acceptable custom ocular prosthesis has the following benefits:

- a. Retains the shape of the defected socket.
- b. Prevents collapse or loss of the shape of the lids.
- c. Provides proper muscular actions of the lids.
- d. Prevents accumulation of fluid in the cavity.
- e. Requires lesser removal & cleaning of the prosthesis.
- f. Maintains palpebral opening similar to natural eye.
- g. Mimics the colouration and proportion of the natural eye.
- h. Has a gaze similar to the natural eye.
- i. Movements are very similar as the other eye depending on the condition of the socket.



## Posterior Surface: Readymade Vs Customized

Apart from very low cosmetic outcome, the readymade artificial eye (stock eyes) is do more harm than benefit-

- a. Prolong use of stock eyes can cause lower lid laxity due to the improper shape and weight of
- b. Stock eyes leads to entropion by causing socket contracture.
- c. Causes superior sulcus deepening and upper eye lid ptosis due to poor support from the readymade shape and size.

It causes frequent inflammation, excessive mucoid discharged, giant papillary conjunctivitis, pyogenic granulomas due to low grade material and final finish.

- d. Requires very frequent removal & cleaning of prosthesis.
- e. Repeated removal by pulling the lower lid in fact puts a lot of stress on the muscle tone, thus causing lower eye lid laxity.
- f. Leads to thinning, fistula and defect of the tissue over the implant leading to implant exposure and infection in the anophthalmic socket.
- g.



**Cyst formation seen after using stock eye**



**Improper fitting of readymade eye Lower lid deformity**



**Discharge seen in socket using Stock eye use**



**Socket Inflammation seen after stock eye use**

- h. In pediatric anophthalmia which can be congenital or acquired, microphthalmia, Custom Design Prosthesis should be started as early as possible for proper expansion of the soft tissue and bony orbit for else the socket might start to contract in due course of time.



The anophthalmic socket has a unique set of problems and required a different clinical approach. The management of these patients should be carried out with close communication between ophthalmologist and ocularist to achieve optimal comfort and cosmesis for the patient

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বংছোৱানাৰ এগৰাকী ইভ’

মই ভাৱো মননশীল আৰু চিন্তাশীল আধুনিক মানুহৰ মন খুলি খুলি খোৱা আটাইতকৈ গুৰুত্বপূৰ্ণ প্ৰশ্নটিয়েই হৈছে “আমি কৰ পৰা আহিলো কেনেকৈ আমাৰ জন্ম হ’ল, আৰু আমাৰ ভৱিষ্যত কি?” বিশ্বব্ৰহ্মাণ্ডত আমাৰ জন্ম কিয় হ’ল তাৰ উত্তৰ আমাৰ হাতত নাই, তাৰ গুঢ়াৰ্থ সৃষ্টিকৰ্তাইহে জানিব। কিন্তু আমাৰ জন্ম কেনেদৰে হ’ল তাত নিশ্চয় আমি আমাৰ জ্ঞানৰ পোহৰ পেলাব পাৰো।

ঠাইখনৰ নাম হৈছে “মেকগডিকগাডি-ওকাভেংগো” দুই লাখ বছৰ পূৰ্বে তাত এটা সৰোবৰ আছিল, যাৰ আয়তন লেক্‌ভিকটোৰিয়াৰ দৃশ্য। সেই স্থান এতিয়া মৰুভূমি। উক্ত স্থানেতেই প্ৰথম আধুনিক মানুহে বসবাস কৰিছিল বুলি আজিৰ বিজ্ঞানীসকলে দাবী কৰে। বংছোৱানাৰ এই ঠাই টুকুৰা হ’ল আফ্ৰিকা মহাদেশৰ দক্ষিণৰ কালাহাৰি মৰুভূমিত। দুই লাখ বছৰ পূৰ্বে এই ঠাই আছিল ইনষ্টিটিউট অৱ মেডিকেল ৰিছাৰ্চ এণ্ড ইউনিভাৰ্চিটি অৱ ছিডনী”-ৰ এডল গৱেষক এই অঞ্চলৰ জীৱাণু ডি এন এ অধ্যয়ন কৰি আধুনিক মানুহৰ জিনগত টাইম লাইনৰ লগত সম্পূৰ্ণ সাদৃশ্য দেখা পায়। বিজ্ঞানীসকলে দক্ষিণ আফ্ৰিকা আৰু নামিবিয়াৰ আদি বাসিন্দা খোছিয়ান গোষ্ঠীৰ দুশ মানুহ ডি এন এৰ নমুনা সংগ্ৰহ কৰি অধ্যয়ন কৰিছিল। তেওঁলোকৰ দেহত আছিল প্ৰচুৰ পৰিমাণৰ “এন ও ডি এন এ”। এই এল ও ডি এন এ দুই লাখ বছৰ পূৰ্বে আফ্ৰিকাৰ দক্ষিণত বংছোৱানাৰ জাম্বোজি নদীৰ উপকূল অঞ্চলটোত উপলব্ধ আছিল। অলপতে ‘নেছাৰ’ পত্ৰিকাত প্ৰকাশিত গৱেষনা পত্ৰিকাত কোৱা হৈছে যে, প্ৰায় দুই লাখ বছৰ পূৰ্বে বিৱৰ্তন ঘটি উত্তৰ বংছোৱানাত আধুনিক মানুহৰ জন্ম হৈছিল। তাৰমানে আমি পৃথিৱীৰ সকলো মানুহেই (হ’ম’ ছেপিয়েনছ ছেপিয়েনছ) বংছোৱানাৰ জাম্বোজি নৈৰ উপকূলত বাস কৰা এগৰাকী মাতৃৰ সন্তান। কথাটো সাধুকথা যেন লাগিলেও, ই প্ৰায় এশ শতাংশই সত্য। বিৱৰ্তন বা প্ৰাকৃতিক নিৰ্বাচনৰ প্ৰথম চৰ্তটোৱেই হৈছে জিনীয় উৎপৰিৱৰ্তন (Genetic Mutation)। প্ৰায় দুই লাখ বছৰ পূৰ্বে এটা নিৰ্দিষ্ট দৈৱিক মূহুৰ্তত আফ্ৰিকাৰ বংছোৱানাৰ জাম্বোজি নৈৰ উপকূলত মাত্ৰ এগৰাকী মাতৃয়ে লাভ কৰিছিল আধুনিক মানুহৰ ডি এন এ, প্ৰথমবাৰৰ বাবে এগৰাকী আধুনিক নাৰীৰ জন্ম হৈছিল, এগৰাকী ইভ’, আমাৰ সকলোৰে মাতৃ!

মানুহৰ বিৱৰ্তনৰ কাহিনী অতি জটিল, দীঘলীয়া আৰু অতি ৰোমাঞ্চকৰ। আধুনিক মানুহে নিজে বিৱৰ্তনৰ জৰিয়তে লাভ কৰা ভাষা, জ্ঞান আৰু লিপিত নিজৰ বুৰঞ্জী লিখিবলৈ শিকিছে, কিন্তু হাজাৰ লাখ বছৰ পূৰ্বে মানুহৰ বিৱৰ্তনৰ ইতিহাস প্ৰকৃতিয়ে নিজেই লিখি থৈ গৈছে ভগৱানৰ ভাষাত, বৰফৰ মাজত, শিলৰ বুকুত, জীৱাণুৰ অনু-পৰমানুত। ঈশ্বৰে দিয়া মগজুৰে আমি তাৰ পাঠোদ্ধাৰ কৰিব লাগিব।

আধুনিক মানুহৰ কথা বাদেই, আমাৰ পূৰ্বপুৰুষি বনমানুহসকল (খোজকঢ়া বান্দৰ, বা বান্দৰজাতীয় প্ৰাণী) প্ৰতিকূল প্ৰাকৃতিক পৰিৱেশ, খাদ্যৰ সন্ধানত এখন মহাদেশৰ পৰা আন এখন মহাদেশলৈ যাত্ৰা কৰিছিল। এই যাত্ৰা আছিল অতি দীঘলীয়া, এটা প্ৰজাতিৰ বান্দৰজাতীয় প্ৰাণী এখন মহাদেশৰ পাৰ আন এখন মহাদেশ পাবলৈ লাগিছিল বহু শ, হাজাৰ বছৰ। প্ৰতিকূল পৰিবেশৰ লগত সহাবস্থান কৰিবলৈ খাদ্য আৰু বাসস্থানৰ সন্ধানত কৰা সংগ্ৰামে সিহঁতৰ দেহত জিনীয় উৎপৰিৱৰ্তন ঘটাইছিল আৰু এটা নতুন উন্নত প্ৰজাতিৰ সৃষ্টি হৈছিল আৰু নিজকে খান খুৱাই চলিবলৈ চলিবলৈ শিকিছিল। বহু প্ৰজাতি এটা স্তৰতে থমকি ৰৈ চিৰদিনৰ বাবে বিলুপ্ত হৈ গৈছিল।

ইংৰাজ প্ৰকৃতিবিদ চাৰ্লছ ডাৰুউইন ১৮৭১ চনত তেওঁৰ মানুহৰ ক্ৰমবিকাশ (The Descent of Man) নামৰ গ্ৰন্থখনত প্ৰথমবাৰৰ বাবে উল্লেখ কৰে যে, মানুহৰ উৎপত্তি হৈছে বান্দৰ জাতীয় প্ৰাণীৰ ক্ৰমবিকাশৰ (Apes) পৰা। ডাৰুউইনে ১৮৩১ চনৰ পৰা ১৮৩৬ চনলৈ ‘HMS Beagle’ নামৰ এখন জাহাজত উঠি পাচবছৰীয়া সমুদ্ৰ যাত্ৰা কৰিছিল। এই যাত্ৰা কালত গোটোৱা শ শ উদ্ভিদ, জন্তু



আৰু চৰাইৰ প্ৰজাতিৰ নমুনাবোৰ পৰ্যবেক্ষণ কৰি দেখিলে যে, একোটা প্ৰজাতিৰ চৰিত্ৰৰ ক্ষেত্ৰত পৰিবেশৰ ভিন্নতাই কিঞ্চিৎ পৰিৱৰ্ত্তন আনি দিয়ে। পৰিৱৰ্ত্তিত পৰিবেশত অধিক খাপ খুৱাই চলিবলৈ এক নিৰ্দিষ্ট প্ৰজাতিৰ জীৱই কেনেকৈ নিজকে সলনি কৰি আন এটা প্ৰজাতিলৈ বিকশিত হয়, সেই সিদ্ধান্তবোৰ “প্ৰাকৃতিক নিৰ্বাচনৰ দ্বাৰা জীৱৰ উৎপত্তি (On the Origin of species by means of natural selection) নামৰ পুথিখনত লিপিবদ্ধ কৰে ১৮৫৮ চনত। ইংৰাজ দাৰ্শনিক হাৰ্ট স্পেন্সাৰে ডাৰউইনৰ এই ‘প্ৰাকৃতিক নিৰ্বাচন’ৰ প্ৰক্ৰিয়াটোক অভিহিত কৰিছিল “যোগ্যতমৰ উত্তৰতন” (Survival of fittest) বুলি। মানুহৰ ক্ৰমবিকাশৰ ষষ্ঠ অধ্যায়ত ডাৰউইনে কেবাটাও শাৰীৰিক (anatomical) আৰু জনীয়.(embryological) সাদৃশ্য উল্লেখ কৰি বান্দৰ আৰু মানুহৰ ওচৰ সম্পৰ্ক প্ৰমাণ কৰিছিল। অৱশ্যে ডাৰউইনৰ এই মতবাদ প্ৰকাশ হোৱাৰ কেবাবছৰ পূৰ্বেই টমাছ হেনৰি হাকসলেইয়ে “প্ৰকৃতিত মানুহৰ স্থিতি” (Mam’s place in nature) নামৰ গ্ৰন্থখনত মানুহ আৰু বান্দৰজাতীয় প্ৰাণীৰ শাৰীৰিক গঠনৰ পুংখানুপুংখ বিজনি আগবঢ়াইছিল। জীৱ উৎপত্তিত ডাৰউইনে মানুহৰ ক্ৰমবিকাশৰ বিষয়ে কোনো মত আগবঢ়োৱা নাছিল। ডাৰউইনে লিখিছিল “মানুহৰ বিকাশ ঘটিছিল এবিধ নোমেৰে ভৰা, চাৰিঠোঙিয়া, লগতে নেজ থকা আৰু সম্ভৱ গছত বাস কৰা প্ৰকৃতিৰ প্ৰাণীৰ পৰা।....ইমানবোৰ সজগুণেৰে বিভূষিত হোৱা সত্ত্বেও মানুহৰ শৰীৰত এতিয়াও তেওঁৰ ইতৰ উৎপত্তিৰ মচিৰ নোৱাৰা সাঁচ ৰৈ গৈছে।” ডাৰউইনে লিখিছিল যে ক্ৰমান্বয়ে হাত আৰু বাহু মুক্তভাৱে সঞ্চালন কৰিব পৰা, দুখন ভৰিত ভৰ দি খোজ কাঢ়িব পৰা হোৱা, লগতে মগজুৰ আকাৰ বৃদ্ধিৰ লেখিয়া মানব সদৃশ চৰিত্ৰৰ বিকাশে সিহঁতৰ পূৰ্বজবোৰতকৈ জীৱনটো অধিক সুবিধাজনক হৈ উঠিছিল। যেতিয়ালৈকে সেই প্ৰাণীবিধৰ হাত দুখন প্ৰধানতঃ শৰীৰৰ ভৰ ৰাখিবলৈ বা গছ বগাবলৈ ব্যৱহাৰ কৰা হৈছিল, তেতিয়ালৈকে হাতদুখন অস্ত্ৰ-সাজিবলৈ, শিল বা যাঠি অত্ৰাস্ত লক্ষ্যৰে মাৰি পঠিয়াবলৈ সক্ষম হোৱা নাছিল।

হাত আৰু হাতোৰা একে নহয়, ইয়াৰ প্ৰভেদ প্ৰকৃতিৰ এক যুগান্তকাৰী প্ৰজাতিৰ ইতিহাসৰ সৃষ্টিৰ স্বাক্ষৰ বহন কৰে। মগজুৰ আয়তনৰ বিকাশ, জিনিয় উৎপৰিৱৰ্ত্তনৰ লগতে শাৰীৰিক অংগৰ ক্ষেত্ৰত প্ৰকৃতিৰ চমৎকাৰ অৱদান হ’ল হাতৰ বুঢ়া আঙুলি। বাকীবোৰ আঙুলিৰ বিপৰীতমুখী বুঢ়া আঙুলি এটা থাকিলে গছত বাস কৰা জন্তুয়ে তৰ্জনী আৰু বুঢ়া আঙুলিৰ সহায়ত গছৰ ফল, গুটি বুটলিবলৈ পাৰে, সৰু-সুৰা সজুলি তৈয়াৰ কৰিব লব পাৰে। এই বুঢ়া আঙুলি আৰু নখৰ বাবেই বান্দৰ জাতীয় প্ৰাণীবোৰে প্ৰথমে ডালত বাস কৰিবলৈ লৈছিল।

গছত বাস কৰা প্ৰাণীৰ বাবে প্ৰয়োজন হয় ত্ৰিমাত্ৰিক দৃষ্টি বা গভীৰতাৰ ধাৰণা। কাৰণ ইডাল গছৰ পৰা সিডাল গছৰ ডাললৈ জপিয়াৰ পূৰ্বে ডাল দুডালৰ মাজৰ দূৰত্ব সম্পৰ্কে সঠিক ধাৰণা কৰি লোৱা প্ৰয়োজন। এই ক্ষমতা ত্ৰিমাত্ৰিক দৃষ্টিৰ দ্বাৰাহে সম্ভৱ আৰু তাৰ বাবে মুৰৰ সমুখভাগত চকু দুটা থকা দৰকাৰ, যিটো বান্দৰজাতীয় প্ৰাণীৰ এক বৈশিষ্ট্য। অন্য বহুতো স্তন্যপায়ী প্ৰাণীৰ তুলনাত বান্দৰ জাতীয় জন্তুবোৰে চকুৰে ৰঙৰ পাৰ্থক্যও ভালদৰে অনুমান কৰিব পাৰে। যাৰ বাবে বিভিন্ন ধৰণৰ ফলমূল সহজে চিনাক্ত কৰিব পাৰে, লগতে চকুৰে যোগাযোগ কৰিবলৈও সক্ষম হয়।

বান্দৰ জাতীয় প্ৰাণীবোৰ সিহঁতৰ শৰীৰৰ পৰা ওলোৱা ফেৰোমন (Pheromone) নামৰ এবিধ বিশেষ গোন্ধযুক্ত ৰস, মুখৰ অংগি-ভংগী বা খেক্‌খেকনী আদি শব্দৰে ইটোৱে সিটোৰ সৈতে যোগাযোগ কৰে। আধুনিক মানুহে কৰাৰ দৰে এই মাধ্যমবোৰেদি কোনো বিশেষ ভাৱ প্ৰকাশ কৰিব নোৱাৰি। বিজ্ঞানীসকলে অনুমান কৰে যে আজিৰ পৰা প্ৰায় ৬০ লাখ বছৰ আগতে পৃথিৱীত মানব সদৃশ প্ৰাণীবোৰ আৱিৰ্ভাৱ হোৱাৰ বহু পিছতহে মানুহৰ পূৰ্বজ সকলে নিৰ্দিষ্ট অৰ্থসূচক শব্দ ব্যৱহাৰ কৰিব পাৰিছিল।

বৰ্তমানৰ পৰা প্ৰায় তিনি কোটি বছৰ আগতে পৃথিৱীত বান্দৰ জাতীয় প্ৰাণীৰ আৱিৰ্ভাৱ ঘটিছিল। এতিয়ালৈকে নিশ্চিতভাৱে চিনাক্ত কৰিবলৈ সক্ষম হোৱা বান্দৰজাতীয় প্ৰাণীৰ আটাইতকৈ পুৰণি জীৱাশ্মটো হ’ল প্ৰায় ২ কোটি ৮০ লাখ বছৰ আগৰ। এই লাউখোলাটো পোৱা গৈছে ইজিপ্তৰ কাইৰোৰ দক্ষিণৰ মৰুভূমি ‘ফায়ুম’ নামৰ ঠাইত। বিজ্ঞানীসকলে এই বান্দৰজাতীয় প্ৰাণীবোৰৰ নাম থৈছে ‘ইজিপ্ত’ পিথেকাছ’ (পিথেকাছ মানে বান্দৰ) মানুহৰ সৈতে প্ৰত্যক্ষ সম্বন্ধ থকা এইটোয়েই এতিয়ালৈকে আৱিষ্কৃত আমাৰ আটাইতকৈ আদিম পূৰ্বজ। বৰ্তমানৰ

আফ্ৰিকীয় চিম্পাঞ্জী আৰু গৰিলা, এছিয় হ'লৌ বান্দৰ আৰু ওৰাংওটান হ'ল এই 'ইজিপ্ত'পেথেকাছ'ৰ বংশধৰ। এইবোৰৰ কোনোটোৱেই নিজৰ বান্দৰ অৱস্থা অতিক্ৰম কৰি আধুনিক মানুহৰ স্তৰ লাভ কৰিবলৈ সক্ষম নহ'ল।

ডাৰউইন আছিল পৃথিৱীৰ সৰ্বশ্ৰেষ্ঠ মহান বিজ্ঞানী সকলৰ এজন অন্যতম। “মানুহক হেনো ঈশ্বৰে মানুহ সৃষ্টি কৰিছিল, ঈশ্বৰৰ অমূৰ সন্তান আদি মানুহৰ উচ্চাত্মিকাবোধ ভাঙি দি প্ৰকৃত সত্য উদঘাটন কৰিছিল। আমাৰ সকলোৰে সৃষ্টিৰ উৎস একেটাই, প্ৰকৃতি তথা সৃষ্টিকৰ্তাৰ অনিৰ্বচনীয় শৈল্পিক হাতৰ পৰশত আমি সকলো নৃত্যৰতা, কাৰ্বন পৰমাণু বা ডি এন এ অনুৰ ভঙা-গঢ়াৰ খেল। হাজাৰ লাখ বছৰৰ এই জীৱন্ত প্ৰজাতিৰ ভাষ্কৰ্য্যবোৰৰ আস্থান-প্ৰস্থান আমাৰ বাবে দুৰ্লংঘ্য, প্ৰহেলিকাময়, কিন্তু সৃষ্টিকৰ্তাৰ বাবে এই সময় হয়টো সামান্য এটা ক্ষণ, এটা লহৰ মাথো। ইমান ভিন্নতা, বিচিত্ৰতাৰ মাজতো সুক্ষতাৰ গভীৰত এটা সুৰেই বাজি আছে। কাৰ্লছগানে কোৱাৰ দৰে “One voice in the Cosmic fugue” ডাৰউইনে পোন প্ৰথমে মত আগবঢ়াইছিল যে, মানব জাতিৰ বিকাশ পোনতে আফ্ৰিকাত, আজি আমি সচাকৈয়ে দেখিছো তেওঁৰ ধাৰণা শুদ্ধ আছিল। ডাৰউইন মানুহৰ ক্ৰমবিকাশ প্ৰকাশ হোৱাৰ লগে লগে ছলস্থূল লাগি গ'ল; তেওঁ লিখা কথাবোৰ প্ৰতিষ্ঠিত ধৰ্মবিশ্বাসৰ পৰিপন্থী আছিল। দুখৰ কথা এতিয়াও আধুনিক পৃথিৱীৰ বহু মানুহে ডাৰউইনৰ তত্ত্ব বিৰোধিতা কৰে।

উত্তৰ আফ্ৰিকাৰ বিষুৱীয় ঘন হাবিবোৰত বাস কৰা আদিম বান্দৰ জাতীয় প্ৰাণীবোৰৰ আছিল দক্ষ্য ত্ৰিমাত্ৰিক দৃষ্টি আৰু গছত আৰামদায়ক ভাবে বাস কৰিব পৰাকৈ শৰীৰৰ পেশীবোৰৰ আছিল সমন্বয় ঘটাব পৰা ক্ষমতা। তেনে খোজ কঢ়া বান্দৰজাতীয় প্ৰাণী হিচাপে উল্লেখ কৰিব পাৰি “অষ্ট্ৰেলপিথেকাছ আপাৰেনছিছ”ৰ। আজি পৰা প্ৰায় এক লাখ মান বছৰ আগতে বান্দৰ জাতীয় প্ৰাণীৰ মগজুৰ আকৰে বৃদ্ধি হৈ মানুহৰ বিকাশ হৈছিল, আৰু এই ঘটনাটো ঘটিছিল আফাৰেনছিছ বোৰে দ্বিপদ চলন ক্ষমতা আহৰণ কৰিব পৰা হোৱাৰ বহু পাছতহে। কথাটো এনেকুৱা যে ‘অফাৰেনছিছ’ৰ হাতদুখন শিলৰ আহিলা প্ৰস্তুত কৰাৰ দৰে জটিলকামৰ বাবে পৰিচালনক্ষম হৈ উঠাৰ পিছতহে এটা অধিক উন্নত আৰু কাৰ্যক্ষম মগজুৰ প্ৰয়োজন দেখা দিলে। ‘অষ্ট্ৰেলপিথেকাছ আফাৰেনছিছ’ সম্ভৱত; মানুহৰ আদিমতম পূৰ্বজ।

আধুনিক মানুহৰ আৰিৰ্ভাৱ ঠিক কেতিয়া; বান্দৰ জাতীয় প্ৰাণীৰ কোনটো ডালৰ পৰা উদ্ভৱ হৈছিল তাক সঠিক কৈ কোৱা টান। বহু প্ৰত্নতাত্ত্বিকে নিয়োগাৰটেল’ মানৰ পৰা আধুনিক মানুহৰ সৃষ্টি হৈছে বুলি ক'ব খোজে। কিন্তু ১৮৬৮ চনত দক্ষিণ পশ্চিম ফ্ৰান্সৰ ‘ক্ৰ’মেনয়েঁ’ (Cro-magnon) নামৰ ঠাইত উদ্ধাৰ হোৱা পাঁচটা জীৱাশ্মই খেলি মেলি লগাই দিলে। ৰেলৰ আলি বহুৱাবলৈ মাটি খান্দি থাকোতে উদ্ধাৰ হোৱা জীৱাশ্মকেইটা আছিল প্ৰথম আধুনিক মানুহ বা ‘হম’ছেপিয়েনছ ছেপিয়েনছ’ৰ। সিহঁতৰ লাউখোলাৰ আকৃতি ‘নিয়োগাৰটেল’ মানৱতকৈ সমপূৰ্ণবেলেগ আছিল, সিহঁতৰ শাৰিৰীক গঠন বৰ্তমান যুগৰ মানুহৰ দৰে প্ৰায় একে। লাওঁখোলাৰ আকৃতিৰ পৰা ধৰিব পৰি যে সিহঁতৰ মাত-কথাও আছিল; ভাৱৰ আদান প্ৰদান কৰিব পৰা এটা ভাষাও আছিল। বৰ্তমানৰ পাৰ্ব ৫ হাজাৰ বছৰ আগতে এই ক্ৰ’মেনয়েঁ মানব ইউৰোপত বাস কৰিছিল। সিহঁতৰ উৎপত্তি হৈছিল আজিৰ পৰা প্ৰায় এক লাখমান বছৰ আগতে আফ্ৰিকাত। দক্ষিণ আফ্ৰিকাৰ গুহাত উদ্ধাৰ হৈছিল সিহঁতৰ লাওঁখোলা। গতিকে নিয়োগাৰটেল মানৱ আৰু আধুনিক মানুহৰ আৰিৰ্ভাৱ একে সময়তে হৈছিল। ‘নিয়োগাৰটেল’ মানবৰ পাৰ আধুনিক মানুহৰ আৰিৰ্ভাৱ হোৱা সম্ভৱনা অতি কম। বেছিভাগ প্ৰত্নতাত্ত্বিকে একমত প্ৰকাশ কৰে যে নিয়োগাৰটেল মানৱ আৰু আধুনিক মানুহৰ বিকাশ একোটা ঠাল ‘হ’ম’ইৰেকটাছ’ৰ ৰ পৰাই হৈছিল আফ্ৰিকাত। কোষৰ মাইট’কণ্ডিয়াত থকা ডি এন এ নামৰ জিনীয় পদাৰ্থবিধ বিশ্লেষণ কৰি বিজ্ঞানী সকলে কৈছে যে আজিৰ পৰা দুই লাখ বছৰ আগতে আফ্ৰিকাত বাস কৰা এজনী মাইকী বন মানুহেই হ'ল বৰ্তমান পৃথিৱীত থকা প্ৰতিগৰাকী ব্যক্তিৰ পূৰ্বজ। আমি আটায়ে একেগৰাকী মাতৃৰে সতি সন্ততি, দুই লাখ বছৰৰ আগতে আফ্ৰিকাৰ বৎছোৱানাৰ জাম্বোজি নদীৰ উপকূলত বাস কৰা এগৰাকী ইভ’ৰ।

জীৱন-ব্ৰহ্মাণ্ডৰ সংগীত

১৮৫৯ চনত “The origin of species” ত ডাৰউইনে লিখিছিল “Probably all the organic beings which have ever lived on this earth have descended from some one primordiae form, into which life was first breathed....There is grandeur in this view of life...that, whilst this planet has gone cycling on according to fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved.”

এসময়ত পৃথিৱীখন আছিল নিৰ্জন, জনপ্ৰাণীহীন, প্ৰজনন ক্ষমতাহীন এটা অনুৰ্বৰ গ্ৰহ। এতিয়া জীৱ-জন্তুৰে কোলাহলময়, পৰিপূৰ্ণ এটা জীৱন্ত গ্ৰহ। সকলোবোৰ জীৱই জটিল জৈৱ-ৰাসায়নিক অনুৰে গঠিত, যাৰ মূল আধাৰ হ'ল কাৰ্বন পৰমাণু। জীৱ সৃষ্টি হোৱাৰ আগতে প্ৰথমে কেনেকৈ কাৰ্বন পৰমাণুৰ সৃষ্টি হৈছিল, পিছত কাৰ্বন পৰমাণুয়ে জটিল ৰাসায়নিক অণুৰ সৃষ্টি কৰিছিল? কেনেকৈ একোষী জীৱৰ পৰা বিৱৰ্তনৰ মাজেদি আজিৰ জটিল মগজুৰ আধুনিক মানুহৰ সৃষ্টি হৈছে, যিয়ে নিজেই নিজৰ সৃষ্টিৰ উৎস আৰু প্ৰক্ৰিয়া উদ্ঘাটন কৰিবলৈ আগবাঢ়িছে? পৃথিৱীৰ বাহিৰত বেলেগ সৌৰজগতৰ কোনোবা গ্ৰহত প্ৰাণী আছে নে? সেই প্ৰাণীবোৰ আমাৰ দৰে একে জৈৱ-ৰাসায়নিক অনু বা কাৰ্বন পৰমাণুৰে গঠিত নে? নে বেলেগ পদাৰ্থ বিজ্ঞানৰ নিয়মেৰে চালিত, ভিন্ন-পাৰিপাৰ্শ্বিক পৰিবেশৰ অভিযোজনাও সিহঁত আমাতকৈ সম্পূৰ্ণ বেলেগ? এনেকুৱা কি আৰু অনেক বিভিন্ন সম্ভৱনা আছে? আমি পৃথিৱীত কেনেকৈ সৃষ্টি হলো আৰু পৃথিৱীৰ বাহিৰত অন্য কোনো জীৱ আছে নেকি- এই প্ৰশ্ন দুটা এটা প্ৰশ্নৰেই দুটা ফাল। প্ৰশ্নটো হৈছে “আমি কোন”?

কল্পনাকাৰাতকৈয়ো বিশাল আন্তঃনাক্ষত্ৰিক মহাকাশত, ঘন ঘোৰ ঘোৰ অন্ধাকাৰত আচলতে গেছীয় ডাৱৰ, জৈৱ-ৰাসায়নিক অনুৰ ধূলিৰে ভৰ্তি হৈ আছে। ৰেডিঅ'-টেলিস্কোপেৰে অধ্যয়ন কৰি এই ধূলিৰ গেছীয় ডাৱৰবোৰত পাৰ বাৰ বিধ মানতকৈও অধিক বিভিন্ন প্ৰকাৰৰ জৈৱ-ৰাসায়নিক অনু পোৱা গৈছে। ইয়াৰপৰা বিশ্বব্ৰহ্মাণ্ডৰ প্ৰায় সকলোতে প্ৰচুৰ পৰিমাণে বিয়পি আছে। এই কেটা মালৰ পৰাই জীৱৰ উৎপত্তি আৰু বিৱৰ্তনত প্ৰকৃতিয়ে প্ৰচুৰ দীঘলীয়া সময় খৰছ কৰে; ই যেন অমোঘ অলংঘনীয় নিয়ম (A cosmic inevitability) হাটিপটি তাৰকাৰাজ্যৰ (Melky way) হয়টো বহুকেটি গ্ৰহত জীৱৰ আৰিৰ্ভাৱ হয়তো কেতিয়াও নহ'ব পাৰে, কিছূমান গ্ৰহত হয়টো জীৱনৰ আৰিৰ্ভাৱ হৈ পিছত কিবা কাৰণত সকলো বিলুপ্ত হৈ গ'ল (arise and dieout), আৰু কিছূমান গ্ৰহত হয়টো জীৱৰ প্ৰাথমিক স্তৰৰ একোষী অৱস্থাতে থাকিল, উন্নতস্তৰলৈ বিৱৰ্তনেই নহ'ল। হয়তো বহুত কম সংখ্যক গ্ৰহত উন্নত জীৱৰ সৃষ্টি হৈছে, হয়তো আমাতকৈ বেছি বুদ্ধিমত্তাৰ আৰু সভ্যতাৰ সৃষ্টি হৈছে আমাৰ অজ্ঞাতে।

প্ৰাথমিক স্তৰত যিবিলাক জীৱ বা অনুজীৱ প্ৰকৃতিৰ লগত নিজকে খাপ খুৱাব নোৱাৰিলে, সিহঁত বিলুপ্ত হৈ গ'ল। আমি জন্ম লাভ কৰিছো সেইবিলাক জীৱৰ পৰা যিয়ে অভিযোজনাৰ যুদ্ধত জয় লাভ কৰিছে, আৰু বহু হাজাৰ বছৰ ধৰি আমি পৃথিৱীত বাস কৰি আছো। পৃথিৱীৰ সকলো জীৱৰ উৎপত্তিৰ মূল উৎস একেটাই, আমি সকলো জীৱই অতি ওচৰ সম্পৰ্কীয়। আমাৰ সকলোৰে আছে এক উমৈহতীয়া ৰসায়ন আৰু এক উমৈহতীয়া আদিমতম পৰম্পৰা আৰু উত্তৰাধিকাৰ (Common evolutionary heritage)। সেয়ে আমাৰ জীৱবিজ্ঞানীসকলৰ পৰ্যবেক্ষণ ক্ষমতা সীমাবদ্ধ হৈ ৰৈ গৈছে। তেওঁলোকে কৰা প্ৰায় একমুখী জীৱ বিজ্ঞানৰ অধ্যয়নে বিশালবিশ্বৰ জীৱকুলৰ যি বুৰঞ্জী, ক্ৰমবিৱৰ্তনৰ যি লয়, যি মূল সংগীতৰ মুচ্ছনা, তাত এটা নিশকটীয়া অকলসৰীয়া সুৰৰেই সৃষ্টি কৰিব পাৰিছে। এই সুৰ মূল সংগীতৰ এটা সামান্য স্কীন অংশহে। এই বিশাল তাৰকাৰাজ্য বা ব্ৰহ্মাণ্ডত হাজাৰ-বিলিয়ন এনে কণ্ঠস্বৰে নিৰ্মান কৰিছে সমন্বয়ৰ সুৰ সমলয়, যি সুৰত নাচি আছে তালে তালে সমগ্ৰ জীৱকুল, সমগ্ৰ বিশ্ব-

“Is this faint and ready tune the only voice for thousands of light year? or is there a kind of cosmic fugue, with themes and counterpoints, dissonances and harmonies, a billion different voices plays the life music of the Galaxy? (Carl Sagan : Cosmos)

সূত্ৰঃ (১) মানুহৰ ক্ৰমবিকাশৰ কাহিনী

—বিমান বসু

(২) কাৰ্লছেগাল-‘কচমচ’.....



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# Ophthalmological Society of Assam (Since 1967....)

## A brief history

### The Beginning

All Assam Ophthalmological Society (AAOS) was formed in 1967. In the inaugural meeting, an executive committee was formed where Dr GS Guha and Prof LC Dutta were elected Founder President and Secretary respectively. The Principal of GMC, Prof SN Sarma graced the occasion as Chief Guest. It may be noted that AAOS is the pioneering "Society" amongst all the medical science based organizations in Assam.

### Founder members

'Some of the founder members of the Society were Late Dr GS Guha, Late Dr PK Roy Choudhury, Late Dr Keshab Sengupta, Dr S Roy, Dr. LC Dutta, Dr SN Kalita from Gauhati and Dr PN Borgohain from Shillong.' Dr LC Dutta, then Secretary and widely regarded as the Father of Ophthalmology in Assam, was ably supported by Dr. SN Kalita, Dr. HN Hazarika, Dr. A Hussain, and others.

### The first conference, 1967

On 10<sup>th</sup> April 1967, the inaugural conference was held at Gauhati Medical College (now MMC Hospital). It was attended, among others, by 16 ophthalmologists, who were designated as members of the society, as under:

<b>Dr GS Guha</b>	<b>Dr LC Dutta</b>	<b>Dr Lal K Dutta</b>
<b>Dr SN Kalita</b>	<b>Dr HN Hazarika</b>	<b>Dr A Hussain</b>
<b>Dr T Roy Choudhury</b>	<b>Dr PN Borgohain</b>	<b>Dr Padum Gogoi</b>
<b>Dr Nabin Ch Bordoloi</b>	<b>Dr Basudev Ch Das</b>	<b>Dr S Roy</b>
<b>Dr Satyabrata Baruah</b>	<b>Dr Golok Bhattacharyya</b>	<b>Dr Basiruddin Ahmed</b>
<b>Dr KR Dutta</b>		

Interestingly, Dr GS Guha was the only speaker to present an eye related scientific paper.

Initially, all AAOS conferences were hosted at Medical Colleges only. The Annual conference was held outside the medical colleges, for the first time in 1988, at Digboi. Assam hosted the All India Ophthalmological Society Annual Conference twice, in 1975, and in 1998, both at Guwahati.

### AIOS 35<sup>th</sup> Annual Conference 1975

AAOS, led by Dr LC Dutta, successfully hosted the AIOS National Conference in 1975. Attending delegates from different parts of India numbered about 350. The no. of free papers was about 45. AAOS effort was singularly noteworthy for the year of its hosting. Incidentally, the 35<sup>th</sup> AIOS conference was also the first National level Medical conference ever held in the region.

### AAOS Trust (1976)

Dr LC Dutta formed the AAOS trust in 1976 with the surplus of AIOS conference, 1975. The trustee members were Prof LC Dutta, Principals of three Medical Colleges, Director of Health Services, and Director of Medical Education of Assam, President and Secretary of AAOS, Dr Pratul Goswami, and others. Today, the Trust

*All Assam Ophthalmological Society 1967-1991.* Dr CK Barua (Former President OSA, 2008-2010).

Silver Jubilee Souvenir, AAOS, 1991, pp.17-18

*All Assam Ophthalmological Society: A Bird's eye view.* Dr Nareswar Dutta [Former President, AAOS (1994-1996); participant and organising committee member at the first conference].

Golden Jubilee Souvenir, OSA, 2017, pp.30-31

No original document from 1967 could be sourced as yet.



sponsors guest speaker(s) for OSA Annual Conference.

### **AIOS 56<sup>th</sup> Annual Conference, 22-25 January, 1998**

For the first time, live surgery featured on the scientific program. It was graced by Dr Akira Nakajima from Japan, and President, International Council of Ophthalmology, with an acknowledgement that 'India is currently performing the largest number of cataract extractions in the world'. It was also marked by a deeply introspective 'Presidential Address' by Dr Daljit Singh.

**The Silver Jubilee of AAOS:** It was celebrated along with EIZOC on 25-27 October, 1991 at Guwahati.

**Golden Jubilee, OSA, 2017:** OSA celebrated its golden jubilee from 8<sup>th</sup>-10<sup>th</sup> December, 2017, at Gauhati Medical College where it all began. With Dr Harsha Bhattacharjee as President, it saw 346 registered delegates, 70 scientific papers, and a webinar being conducted for the first time.

### **Important activities**

OSA has actively collaborated with AIOS for ARC programs like Combat Ocular Infections (2016), Diabetic blindness (2017), Childhood blindness (2017), Glaucoma (2018), Cataract (2018). OSA is also implementing AIOS 'Go Green' initiative.

OSA has organised conferences at Tier-3 cities, both within and outside Assam, and has had sessions for fora like ACOIN, India Society MSICS, IJO sessions, medical ethics, with CME Credit points. Various CMEs have been organised under the Aegis of OSA. OSA members actively contribute to occasions such as World Sight Day, World Glaucoma week etc.

The Journal of AAOS was published for the first time in 1993, with Dr Gautam Saikia (Former President, AAOS, 1998-2000) as the Editor. Since 2017, the Journal of OSA has been published annually.

The constitution of AAOS was adopted in the eighties. The Logo of AAOS was designed by artist Benu Mishra and accepted in 1995. All Assam Ophthalmological Society was renamed as Ophthalmological Society of Assam (OSA), and registered in 2010-11, and all records updated as per Society Act. The constitution of OSA was adopted on 24 November, 2018 at Silchar. Elections were held for the first time in 2018.

**Current strength:** : OSA has 591 Life members as on 31 Dec 2018, comprising members from all over India, and few from abroad too.

OSA members have received recognition nationally & internationally for individual as well as collaborative scientific achievements. Members are involved in diverse fields such as examiners for FRCS, reviewers for reputed journals, National bodies like Indian Medical Association, Institutional Ethics Committees, NABH, Entrepreneurship, Blind Schools, and the Arts, indicating a holistic engagement with the overall ecosystem. OSA has a functioning website, and a vibrant social media discussion group. A theme song is under active consideration.

Published in 'History of AIOS' in 2019 on the occasion of 200 years of Indian ophthalmology.

*Welcome.* Dr LC Dutta, Chairman, Local Organising Committee.

Souvenir, 56th Annual Conference AIOS, 1998, p.1



তথাকথিত আধুনিক স্কানুই (২)

— ডাঃ সৌভট কুম্ভাৰ টুংগা

স্নাজে-স্নাজে লোৱা

অকলসৰীয়া নিৰিবিলি সন্ময়বোধত  
নিজৰ লগত বাক আপুনি কি কথা পাতে ?

নিজৰ লগত কথা পাতি আহুনে নিজৰ প্ৰতি বেঈছা  
আৰু নিজ বিবেকৰ ওচৰত দৃঢ়বোধৰ ভাৱ ?

লোৱণেন কেতিয়াবা আত্মগ্লানিত ?  
লাগণেন নিজলৈকে লাভ ?

আপুনি যদি চিকিৎসাৰ বাহিৰেই হৈ গলটো  
তেও লোকচক্ষুৰ আগত যি কয় কৈ থাকক  
যি মন যায় কৰি থাকক

কেৱল আপুনি স্কোৱা যা কৰাবোৱেই শুদ্ধ বুলি  
আন্ধাৰ বাৰম্বাৰ বুজাবলৈ কৰা চেষ্টাত  
লিছাতে সন্ময়বোধ নষ্ট নকৰিব .....

বৰং সেইবোৰেই শুদ্ধ বুলি  
নিজকে প্ৰত্যয় নিয়ন্ত্ৰণে চেষ্টা কৰিব  
যি চেষ্টাত ওচলতে অৱধাৰিতাবেই  
নিজ বিবেকেই হ'ব আটপোনাৰ প্ৰধান অক্ষু  
একপ্ৰকাৰ যব বিজীৱণৰ দৰে ?

কাৰণ প্ৰত্যেকজন স্কানুই  
যিজনক সকলোতকৈ ভালকৈ চিনি পায়  
সেই স্কানুইজন দুৰ্ভাগ্যবশত: তেঁও নিজেই.....

মিছাকথাৰ ফুলসৰীবোৰৰ কলাধাঁতাবোৰ  
বহু ওংকীয়া নাটৰ বচা বচা সৎলাপবোৰ  
স্বৰ্ভসাধাৰণে বুজিব সোৱাৰা অংকৰ প্ৰতিশ্ৰুতিবোৰ  
নিজৰেই বিবেকৰ কৰ্ত্ত কৰি

আহৰণ কৰা আটপোনাৰ প্ৰচুৰ্য্যবোৰ.....  
এই অকলসৰীয়াৰ এদিন আটপোনাৰ নিজৰ কাষলৈকে বুলি আহিব

যি সন্ময়ত প্তাৰ কৰ্মপুৰণি চিনাকি মুখবোৰৰ বাহিৰে  
অন্য কোনো আৰু আটপোনাৰ কাষত নাথাকিব।  
এদিন তমানকি তেঁওলাফো আঁতৰি যাব.....

(স্বিপিচিত)



(২)

এই মাথো স্মৃতিৰ আন্দিৰ বাবে দুটা কথা ক'বলৈ  
যিঅনয়ত আপুনি মানুহ বিচাৰি হাঁহাকাৰ কৰিব  
সুসূৰ্ষ বিবেকক বুকুত আৰতি লৈ  
জীৱনত আপুনি হয়তো প্ৰথমবাৰ অনুভৱ কৰিব  
শান্তি-অনুৰূপে বিদায় ল'বৰ বাবে  
প্ৰয়োজন নাছিল ইমানো প্ৰশ্ৰয় প্ৰোচুৰ্য্যৰ.....

যি নিজেই নিজৰ বিবেকক  
বিনাদ্বিধাৰে বাৰম্বাৰ বাকবন্ধ কৰে  
আচলতে তেওঁ উত্তৰসূৰী আপোনজনৰো  
আত্মক বাৰম্বাৰ হত্যা কৰে

আপোনাৰ ফাঁকি দিয়াৰ এই কৌটুকলীয়া ভেদ্যম আছে  
সেয়া এতিয়া আপোনাৰ চাৰিত্ৰিক বৈশিষ্ট্য  
উপায়তো নাই ....  
ফাঁকি আপুনি টোকাৰেই সংসাৰখনকৈ দিয়ক  
কোনো কথা নাই....  
কিন্তু ফাঁকি আপুনি নিজক নিদিব  
যোৱাৰ বাবে কৰ্ত্ত পাব .....

—X—

— ডা: সৌৰভ কুমাৰ দিগা  
কেতেকীবাৰী, তুতপুৰ  
মোবাইল-৯৪৩৬০৪০২৬০

## ABODE OF UNITY

The enchanting ground of wild souls  
The souls so innocent move and roll  
Nature's greenery bed nourish their ride  
Its magnificent Kaziranga bloom far and wide  
The orchid park near by blossom in colours  
Fragrance of it in twilight dazzle in scintillating showers  
Two rhino brothers silently ramble ahead  
In spite of being traumatized with tears so red  
The migratory birds chirp amidst icy breeze  
Setting on the Rhino flock's back crease  
The hog deer seen feeding on the green herbs  
On whistling peeps at us through lofty shrubs  
Horny giant buffaloes in bath under sun  
Black bears on land rest with them after a big run  
There runs the message of splendid unity  
Prevailing in this wild sanctuary of diversity  
View point discourages tigers drinking quickly  
In the lake of peace and tranquillity  
Human hearts visiting this abode of unity  
Calls for unification in peaceful assembly

**Dr. Jahan Iqbal Ahmed**  
Associate Professor of Ophthalmology  
RIO, Gauhati Medical College



# THANK YOU GRETA

Thank you for opening our eyes Greta,  
We apologise for stealing your dreams;  
Instead of making our Earth better,  
We have made it into a chamber of steams !!

This was never an unknown matter,  
It was everywhere in the news;  
Then why did we not take the adequate measure,  
To check the menace of the climate change blues !!

To speak aloud and alert the world,  
You crossed the big ocean of a thousand miles;  
You dared to expose the wrongs and were bold,  
For the sake of the millions of innocent smiles !!

You have successfully shaken us out of the slumber,  
Your efforts Greta, will never go in vain;  
Man will no more remain a silent spectator,  
Coz we too feel the climate change pain !!

**Dr. Syamanta Boruah**

\*\*\*\*\*



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