

MINUTES OF THE PRE-BID MEETING

On the discussions in pre-bid meeting held on 01/10/2015, the following clarifications have been provided for various aspects of Tender document. The amendments are lists below:

S. No	Page No. , Section & Point no. of tender document	Items in tender document	Clarifications
1	Page no. 01-03 Section B (Specification and Ancillary Requirements)	---	<u>Item no.xxii (addition)</u> One unit of Spherical LED with interface of Computer for live display of weather forecast etc.
	Annexure I Page no. 20-23 (technical bid compliance format)		<u>Item no 31 (addition)</u> One unit of Spherical LED with interface of Computer for live display of weather forecast etc.  <b>Revised Annexure I is attached</b>
	Annexure II Page no. 25-29 (price bid format)		<u>Item no 27 (addition)</u> One unit of Spherical LED with interface of Computer for live display of weather forecast etc.  i. Quote for rental per day ii. Quote for procuring items for MoES use after the event. <b>Revised Annexure II is attached</b>

*MPM/ids*  
5/10/2015

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5/10/15

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<p>2</p>	<p>Page no. . 01-02 Section B (Specification and Ancillary Requirements) point no.5 (iv)</p> <p>Annexure I Page no. 20-23 (technical bid compliance format)</p> <p>Annexure II Page no. 25-29 (price bid format)</p>	<p>Two new reception/ information counter tables, 4 new modern chairs for sitting and 4 visitor chairs, stationary etc. ( visitor books, pens, 2 scissors, ribbon, tray, 500 plastic folders of A4 size, dustbin etc.)</p> <p>Sno. 2 (a) (Two new modern reception.... )</p> <p>(c) (Stationary etc ...)</p> <p>Sno. 2 (a) (Two new modern reception.... )</p> <p>(c) (Stationary etc ...)</p>	<p>Two new reception/ information counter tables, 4 new modern chairs for sitting and 4 visitor chairs, stationary etc. ( visitor books, pens, 2 scissors, ribbon, tray, 500 plastic folders of A4 size, dustbin etc. 1000 nos. of pen drive of 2.0 GB capacity with material on achievement and activities of the Ministry (Material content on achievement and activities of the Ministry will be provided by the Ministry to be handed over to MoES.</p> <p>S.no. 2 (a.) Two new modern reception/ information counter tables (5'x3' approx)</p> <p>(c) Stationary etc. ( visitor books, pens, 2 scissors, ribbon, tray, 500 plastic folders of A4 size, dustbin etc. 1000 nos. of pen drive of 2.0 GB capacity with material on achievement and activities of the Ministry (Material content on achievement and activities of the Ministry will be provided by the Ministry to be handed over to MoES. <b>Revised Annexure I is attached</b></p> <p>- do -</p> <p>-- do -- <b>Revised Annexure II is attached</b></p>
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*U Daniel*  
6/10/2015

*KK Singh*  
6/10/15

*Mand*  
6/6

*Ajwan*  
6/10/15

*Arpinder*  
08/10/2015




<p>Page no. . 01-02 Section B (Specification and Ancillary Requirements) point no. 5. (A)</p> <p>Annexure I Page no. 20-23 (technical bid compliance format)</p> <p>Annexure II Page no. 25-29 (price bid format)</p>	<p>Designing and fabrication of Dioramas - should depict Agro Meteorology, Desalination plant, Arctic &amp; Antarctica or on any other activity and achievements.</p> <p>a. The major other recommended depictions are:</p> <p>All the diorama's should have separate LCD provisions to shows the respective movies.</p> <p>Sno. 24 (Designing and fabrication....)</p> <p>Sno. 23 (Designing and fabrication....)</p>	<p>Designing and fabrication of Dioramas - should depict Agro Meteorology, Desalination plant, Arctic &amp; Antarctica or on any other activity and achievements.</p> <p>a. The major other recommended depictions are:</p> <p>All the diorama's should have separate LED provisions to shows the respective movies.</p> <p>-- do --</p> <p><b>Revised Annexure I is attached</b></p> <p>-- do --</p> <p>i Quote for rental per day ii. Quote for procuring items for MoES use after the event.</p> <p><b>Revised Annexure II is attached</b></p>
<p>4 Page no. . 01-02 Section B (Specification and Ancillary Requirements) point no. ii</p> <p>Annexure I Page no. 20-23 (technical bid compliance format)</p> <p>Annexure II Page no. 25-29 (price bid format)</p>	<p>One 72" TV of dimension 5.5' x 3.5' (Length x height) for screening of Ministry's films.</p> <p>Sno. 03 (ONE 72" ...)</p> <p>Sno. 03 (ONE 72" ...)</p>	<p>One 72" LED TV of dimension 5.5' x 3.5' (Length x height) for screening of Ministry's films.</p> <p>-- do --</p> <p><b>Revised Annexure I is attached</b></p> <p>-- do --</p> <p>i Quote for rental per day ii. Quote for procuring items for MoES use after the event.</p> <p><b>Revised Annexure II is attached</b></p>
<p>5 Page no. . 01-02 Section B (Specification and Ancillary Requirements) point no. 5. (vi) (b. &amp; c.)</p> <p>Annexure I Page no. 20-23 (technical bid compliance format)</p> <p>Annexure II Page no. 25-29 (price bid format)</p>	<p>b. 30-40 nos of posters material in English, Hindi and local dialect in LCD Touch Screen of 42".</p> <p>c. Four nos. of LCD touch screens of 42" each in each the two exhibitions ("IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015 has to be put-up.</p> <p>Sno.5. (2 &amp; 3) (30-40 nos of posters materials &amp; Four nos. of LCD touch screens .....)</p> <p>Sno. 28 (30-40 nos of posters materials &amp; Four nos. of LCD</p>	<p>b. 30-40 nos of posters material in English, Hindi and local dialect in LED Touch Screen of 42".</p> <p>c. Four nos. of LED touch screens of 42" for "IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015 has to be put-up.</p> <p>-- do --</p> <p><b>Revised Annexure I is attached</b></p> <p>-- do --</p>


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6	<p>Page no. 01-02 Section B (Specification and Ancillary Requirements) point no. 5. (vii)</p> <p>Annexure I Page no. 20- 23 (technical bid compliance format)</p> <p>Annexure II Page no. 25-29 (price bid format)</p>	<p>One Separate provision for screening of films on LCD screen of 42"</p> <p>Sno 6. (One Separate provision ....)</p> <p>Sno. 6 (One Separate provision ....)</p>	<p>One Separate provision for screening of films on <b>LED</b> screen of 42".</p> <p>do --</p> <p><b>Revised Annexure I is attached</b></p> <p>One Separate provision for screening of films on <b>LED</b> screen of 42".</p> <p>i. Quote for rental per day ii. Quote for procuring items for MoES use after the event.</p> <p><b>Revised Annexure II is attached</b></p>
6	<p>Page no. . 01-03 Section B (Specification and Ancillary Requirements) point no. xiv</p>	<p>Water Fountains</p>	<p>Water Fountains (Two nos.)</p> <p>- do -</p> <p><b>Revised Annexure I is attached</b></p> <p>-- do --</p> <p><b>Revised Annexure II is attached</b></p>
7	<p>Page no. 10 Section G (Additional information ) point no. xxxv</p>	<p>Photographs/presentation of the following dioramas will be uploaded:</p> <ol style="list-style-type: none"> <li>1. Arctic &amp; Antarctica</li> <li>2. Agro Meteorology</li> <li>3. Desalination plant</li> <li>4. Aviation Sector (IMD activity)</li> <li>5. Earthquake/Seismology</li> <li>6. Climate Change</li> </ol>	<p>Photographs/presentation of the dioramas has been uploaded</p>

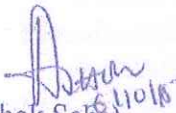
**Note: All the LCD has been replaced as LED**


  
(Dr. K K Singh)  
Member

  
(Dr. O P Mishra)  
Member

  
(Dr. A.B.P Mishra)  
Member

  
(Smt. Manjula Daniel)  
Member

  
(Ashok Saha)  
Member

  
(Dr. K J Ramesh)  
Chairman



## ANNEXURE – I

Designing and Fabrication for Ministry's pavilion during "IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.

TENDER SPECIFICATIONS for compliance for Technical Bid

S No	Tender specifications	firm is ready to comply (Y/N)	Quality of the material
1.	Floor covering with multi colour designed carpets.		
2. a	Two new modern reception/ information counter tables (5'x3' approx)		
b.	4 new modern chairs for sitting and 4 visitor chairs		
c.	Stationary etc. ( visitor books, pens, 2 scissors, ribbon, tray, 500 plastic folders of A4 size, dustbin etc. 1000 nos. of pen drive of 2.0 GB capacity with material on achievement and activities of the Ministry (Material content on achievement and activities of the Ministry will be provided by the Ministry to be handed over to MoES.		
3.	One 72" LED TV of dimension 5.5' x 3.5' (Length x height) for screening of Ministry's films.		
4.	Two artistic gates with artwork, logos, mural, highlighting the name of Ministry in Hindi and English.		
5.	<p><b>1. Thirty nos (Hindi &amp; English-15 nos. each) of the backlit posters of 3'x5' dimension (width x height)</b></p> <p>2. 30-40 nos of posters material in English, Hindi and local dialect in LED Touch Screen of 42"</p> <p>3. Four nos. of LED touch screens of 42" each in each the two exhibitions ("IITF 2015" at Pragati Maidan, New Delhi has to be put-up</p>		
6	One Separate Provision for Screening of films on LED screen of 42".		
7	Preparation of displaying of two 6'x4' murals on Ministry's activities for both the exhibition separately		
8 a	Executive office (3mx2m or more) with glass and lockable door, new modern executive Sofa Set (3+1+1 seater), Centre & side Tables, Matching curtains, etc.		
b	Small pantry with Tea/Coffee and packed drinking water etc. from standard company. ( approx 25 person per day )		
9	A store (1.5m x 1.5m or more) for keeping the exhibits/literature and empty boxes etc.		
10	Display the Ministry's publications, books etc. (30 publications) (Books racks are available with the Ministry)		

S No	Tender specifications	firm is ready to comply (Y/N)	Quality of the material
11	<p>i. 3 nos. of Desktop Machines  ii. Two nos. Data Entry Operator/Service Engineer as per the NICSI Rate Contract  iii. 1 no. KVA Online UPS with 20 minutes backup  iv. 1 no. 8 Port Ethernet Switch  v. 3 nos. of UTP Cables, IO Box and Termination  vi. 1 no. of Laser printer  vii. Certificates for the quiz needs to be on card paper of 200 GSM or higher along with a colour printer.  All systems should be brought to this Ministry's headquarter on 1<sup>st</sup> Nov. 2015 for loading the quiz softwares and for trial for 5 days before <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b>  (Quiz will be provided by the Ministry).  (configuration as per Annexure III)</p>		
12	<p>Three Bachelor of Science graduates, who are fluent in Hindi and English as Hostess/Guides preferably having experience of Ministry's exhibitions and International exhibitions with dress code in consultation of Ministry, shall be posted during <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b></p>		
13	<p>Two dedicated persons for day-to-day work in the pavilion shall be posted in consultation of Ministry with proper dress code during <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b></p>		
14	<p>Four Certified security persons shall be posted for round the clock security for inside and surroundings of the pavilion for <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b> from approved Agency.</p>		
15	<p>Provision of the Fire fighting equipment as per the guidelines of the <b>"Indian Science Congress 2015" Organisers</b></p>		
16	<p>Still photographic coverage shall be arranged during entire exhibition period, and one set of 100 colour photographs (5"x7") with CD and album shall be given to be to the Ministry. The photographer should be available on demand of Ministry (Mobile phone number must be mentioned). The same arrangement for all five places for limited calls, around 20 Nos. colour photographs for each centre with CD and album.</p>		
17	<p>Daily maintenance and cleaning (minute to minute) of the pavilion and surroundings for entire period of <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b> shall be attended.</p>		
19	<p>Arrangement for refreshment during inaugural function at <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b> for</p>		

	500 persons and during the visit of VIPs and senior officers/dignitaries should be provided.		
18	Supply of good interior decorative plants during <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b>		
19	Comprehensive Insurance for entire pavilions including exhibits.		
20	One Scaled 3-D model for IITF 2015 exhibition		
21	Agreed with the penalties mentioned in the tender document		

S No.	Tender specifications	firm is ready to comply (Y/N)	Quality of the material
22	Submitted the Bid Security Amount of Rs. 1,50,000/- (Rs. one lakh fifty thousand only)		
23	<p>Items required for Marine Aquarium (5'x15"x2'- LxBxH): (embedded and visible from outside the pavilion)</p> <p>a. Filter, tube lights, heaters, wooden stand (Available parts) and non-working part/damaged part has to be provided by the bidder.</p> <p>b. Providing and Maintenance of the sea water as per norms.</p> <p>c. Ornamental fishes, sea urchins, sea grass etc. with underwater environment of the oceans Marine Aquarium (2 each of 8 varieties, at any given time not less than 16 Marine species).</p> <p>d. Inverters of adequate capacity for continue uninterrupted power supply for 5-6 hours.</p> <p>e. Maintaining for <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b> (extended in any).Any items not in workable conditions should</p>		
24	<p>Designing and fabrication of Dioramas should depict Agro Meteorology, Desalination plant, Arctic &amp; Antarctica, or on any other activity and achievements. <b>(tentatively)</b></p> <p>- The major other recommended depictions are:</p> <p>(a) Aviation Sector (IMD activity)</p> <p>(b) Climate Science</p> <p>(c) Earthquake/Seismology</p> <p>(Models should be in approx. proportion, colour and made of fibre glass)</p> <p>All the diorama's should have separate LED provisions to shows the respective movies.</p> <p>(Dismantle the stand-alone models should be packed and transported to the Ministry for erection if needed at different sites in future, no additional cost will be paid)</p> <p>1. Dimensions of Arctic &amp; Antarctica- 5.0x4.0 sq.mtrs.</p> <p>2. Dimensions of the following 5 diorama's will be 4.0x2.0 sq.mtrs</p> <p>a. Agro Meterology</p> <p>b. Desalination Plant</p> <p>c. Aviation Sector (IMD activity)</p> <p>d. Climate Science</p> <p>e. Earthquake/Seismology</p>		
25	Audio visual presentation		



26	Enclose necessary photographs of the design/model from all angles.		
27	Transportation of material, if any, from Ministry Headquarters/New Delhi to the site and back by the fabricator		
28	Entire power/electricity consumption charges of the pavilion of MoES given by organizers of IITF 2015 will be borne by the successful bidder.		

S No	Tender specifications	firm is ready to comply (Y/N)	Quality of the material
29	One AC taxi from 6 <sup>th</sup> to 29 <sup>th</sup> Nov. 2015 at New Delhi for exhibition IITF 2015. (150 km per day, 4+1 capacity, which can ply in NCR and Delhi)		
30	To ensure due performance of the contract, Performance security is to be obtained from the successful bidder awarded the Contract. The successful bidder must furnish a Performance Security Deposit equivalent to 10% of the total value of the Contract within 10 days from the date of acceptance of the bid. The Performance Security Deposit shall be in the form of Account Payee Demand Draft/Fixed Deposit Receipt (FDR) or Bank Guarantee from a Commercial Bank drawn in favour of Drawing & Disbursing Officer (DDO), Ministry of Earth Science, New Delhi. Performance Security should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the Bidder.		
31	One unit of Spherical LED with interface of Computer for live display of weather forecast etc.		
32	Water Fountains (Two nos.)		

**(Page number is mandatory & essential in this section)**

<b>S No.</b>	<b>Tender specifications</b>	<b>firm is ready to comply (Y/N)</b>	<b>Page nos.</b>
33	<p>The firm should have the following experience during the last 3 years:-</p> <ul style="list-style-type: none"><li>-Three similar completed works costing not less than Rs.12 lakhs.</li><li>-Two similar completed works costing not less than Rs.15 lakhs .</li><li>- One similar completed work costing not less than Rs.24 lakhs.</li></ul> <p>Similar work means designing, fabrication of pavilion of any Central Govt./ State Govt. or PSU. Relevant experience certificate should be enclosed with Technical Bid.</p> <p>satisfactory certificates from the clients to be enclosed and the complete details for similar undertaken for the clients)</p>		
34	<p>The firm should have Annual Average Turnover of Rs.25 lakhs during the last three years. Audited statement of accounts for 2012-13,2013-14 &amp; 2014-15 are required. (Copies are to be enclosed)</p>		
35	<p>Income-Tax return, for the years 2012-13, 2013-14 &amp; 2014-15) (copies are to be enclosed along with PAN no.)</p>		
36(i)	<p>Profile of the Agency/Company.</p>		
(ii)	<p>Details of Technical Manpower and Staff available in – house.</p>		
(iii)	<p>Track record-details of involvement in similar events.</p>		
(iv)	<p>Specific experience relating to the particular event.</p>		
(v)	<p>The firm should be registered with the Service Tax Department and Sales Tax Department</p>		
(vi)	<p>Details of TIN/TAN numbers Copies are to be enclosed</p>		
(vii)	<p>The firm should be registered under the relevant Act/Rules. A certificate of Registration should be enclosed.</p>		
(vii)	<p>Earnest Money Deposit (EMD) of Rs.1.50 lakhs (Rupees one lakh and fifty thousand only) in the form of Banker's Cheque/Demand Draft/Fixed Deposit Receipt or Bank Guarantee from a commercial Bank and the EMD should be drawn in favour of D.D.O, Ministry of Earth Sciences and payable at New Delhi. The EMD, in original, is required to be deposited in person to this Ministry latest by the last date and time of the bid submission. The details of the Banker's Cheque/DD/FDR/Bank Guarantee, physically sent must tally with the details available in the scanned copy of e-tender uploaded during the bid submission time</p>		

	EMD will be returned to the unsuccessful tenderers at the earliest after expiry of the final tender validity and latest on or before the 30 <sup>th</sup> day after the award of the work contract.		
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## ANNEXURE – II

Designing and Fabrication for “IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.

TENDER SPECIFICATIONS (with financial bid) (in Rupees only)

S No.	Tender specifications	Unit Rate	Quantity	Total Price	All taxes (S. Tax, VAT, Service tax etc.)	Total (Inclusive of taxes)
1	Floor covering with multi colour designed carpets.					
2.	Two new modern reception/ information counter tables (5’x3’ approx)					
b.	4 new modern chairs for sitting and 4 visitors chairs					
c.	Stationary etc. ( visitor books, pens, 2 scissors, ribbon, tray, 500 plastic folders of A4 size, dustbin etc. 1000 nos. of pen drive of 2.0 GB capacity with material on achievement and activities of the Ministry)(Material content on achievement and activities of the Ministry will be provided by the Ministry o be handed over to MoES.					
3	One 72” LED TV of dimension 5.5’ x 3.5’ (Length x height) for screening of Ministry’s films. i Quote for rental per day ii. Quote for procuring items for MoES use after the event.					
4	Two artistic gates with artwork, logos, mural, highlighting the name of Ministry in Hindi and English.					
5	I 3 nos. of Desktop Machines ii. Two nos. Data Entry Operator/Service Engineer as per the NICS Rate Contract iii. 1 no. KVA Online UPS with 20 minutes backup					

<p>iv. 1 no. 8 Port Ethernet Switch  v. 3 nos. of UTP Cables, IO Box and Termination  vi. 1 no. of Laser printer  vii Certificates for the quiz needs to be on card paper of 200 GSM or higher along with a colour printer.  All systems should be brought to this Ministry's headquarter on 1<sup>st</sup> Nov. 2015 for loading the quiz softwares and for trial for 5 days before <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b>  (Quiz will be provided by the Ministry).  (configuration as per Annexure III).</p>					
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6	<p>One Separate provision for screening of films on LED screen of 42".</p> <p>i Quote for rental per day ii. Quote for procuring items for MoES use after the event.</p>					
7.	Preparation of displaying two 6'x4' murals on Ministry's activities for both the exhibition separately.					
8 a	Executive office (3mx2m) with glass and lockable door, new modern executive Sofa Set (3+1+1 seater), Centre & side Tables, Matching curtains, etc.					
b	Small pantry with Tea/Coffee and packed drinking water etc. from standard company. ( approx 25 person per day )					
9	A store (1.5 m x 1.5 m or more) for keeping the exhibits/literature and empty boxes etc.					
10	Display the Ministry's publications, books etc. (30 publications) (Books racks are available with the Ministry)					
11	<p>1 Three nos. of Desktop Machines</p> <p>2. Two nos. of Data Entry Operator/Service Engineer as per the NICS Rate Contract</p> <p>3. 1 no. KVA Online UPS with 20 minutes backup</p> <p>4. 1 no. 8 Port Ethernet Switch</p> <p>5. 3 nos. of UTP Cables, IO Box and Termination</p> <p>6. 1 no. of Laser printer</p> <p>7. Certificates for the quiz needs to be on card paper of 200 GSM or higher along with a colour printer.</p> <p>All systems should be brought to this Ministry's headquarter on 1<sup>st</sup> Nov. 2015 for loading the quiz softwares and for trial before "IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov.</p>					

	<b>2015.</b> (Quiz will be provided by the Ministry). (configuration as per Annexure III)					
12	Three Bachelor of Science graduates, who are fluently in Hindi and English as Hostess/Guides preferably having experience of Ministry's exhibitions and International exhibitions with dress code in consultation of Ministry, shall be posted.					
13	Two dedicated persons for day-to-day work in the pavilion shall be posted in consultation of Ministry with proper dress code during <b>"IITF 2015" at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b>					



14	Four Certified security persons shall be posted for round the clock security for inside and surroundings of the pavilion for <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b> from approved Agency.					
15	Provision of the Fire fighting equipment as per the guidelines of the ITPO					
16	Still photographic coverage shall be arranged during entire exhibition period, and one set of 100 colour photographs (5”x7”) with CD and album shall be given to be to the Ministry. The photographer should be available on demand of Ministry (Mobile phone number must be mentioned).					
17	Daily maintenance and cleaning (minute to minute) of the pavilion and surroundings for entire period of <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015.</b> shall be attended.					
18	Arrangement for refreshment during inaugural function at <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b> for 500 persons and during the visit of VIPs and senior officers/dignitaries should be provided.					
19	Supply of good interior decorative plants during <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b>					
20	Comprehensive Insurance for all pavilions including exhibits.					
21	Items required for Marine Aquarium (5’x15”x2’ - LxBxH): (embedded and visible from outside the pavilion) a. Filter, tube lights, heaters, wooden stand (Available parts) and non working part/damaged part has to be provided by the bidder. b. Providing and Maintenance of the sea water as per norms. c. Ornamental fishes, corals, sea urchins, sea grass etc. with underwater environment of the oceans Marine Aquarium (2 each					

<p>of 8 varieties, at any given time not less than 16 Marine species).</p> <p>d. Inverters of adequate capacity for continue uninterrupted power supply for 5-6 hours.</p> <p>e. Maintaining for <b>“IITF 2015” at Pragati Maidan, New Delhi from 14-27<sup>th</sup> Nov. 2015</b> (extended in any).</p> <p>f. Any items not in workable conditions should</p>					
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22	Designing and fabrication of Ministry pavilion on the <b>bare floor space of 200 sq mts (tentatively)</b>					
23	<p>Designing and fabrication of Dioramas should depict Agro Meteorology, Desalination plant, Arctic &amp; Antarctica, or on any other activity and achievements. <b>(tentatively)</b></p> <p>- The major other recommended depictions are:  (a) Aviation Sector (IMD activity)  (b) Climate Science  (c) Earthquake/Seismology</p> <p>(Models should be in approx. proportion, colour and made of fibre glass)</p> <p>All the diorama's should have separate LED provisions to shows the respective movies.</p> <p>(Dismantle the stand-alone models should be packed and transported to the Ministry for erection if needed at different sites in future, no additional cost will be paid)  Dimensions of Arctic &amp; Antarctica- 5.0x4.0 sq.mtrs.  Dimensions of the following 5 diorama's will be 4.0x2.0 sq.mtrs</p> <p>d. Agro Meterology,  e. Desalination Plant  a. Aviation Sector (IMD activity)  b. Climate Science  c. Earthquake/Seismology</p>					
24	Models etc should be transported to IITF 2105 exhibition venue from MoES, Delhi & back by the fabricator.					
25	Entire power/electricity consumption charges of the pavilion of					

	MoES given by organizers of IITF 2015 will be borne by the successful bidder.					
26	One AC taxi from 6th to 29th Nov. 2015 at New Delhi for exhibition IITF 2015. (150 km per day, 4+1 capacity, which can ply in NCR and Delhi)					



27	One unit of Spherical LED with interface of Computer for live display of weather forecast etc.  i Quote for rental per day ii. Quote for procuring items for MoES use after the event.		01			
28	<b>1. Thirty nos (Hindi &amp; English-15 nos. each) of the backlit posters of 3’x5’ dimension (width x height)</b> 2. 30-40 nos of posters material in English, Hindi and local dialect in LED Touch Screen of 42” 3. Four nos. of LED touch screens of 42” each in each the two exhibitions (“IITF 2015” at Pragati Maidan, New Delhi has to be put-up					
29	Water Fountains (Two nos.)		02			

**Grand Total (in figures) Rs. ....**  
(inclusive of all taxes)

**Grand Total Cost (in words) : Rs.....**  
(inclusive of all taxes)

Date:

Place:

Signature of authorized person

Name

(Company Seal)

\_\_\_\_\_ In the capacity of

\_\_\_\_\_

Duly authorized by

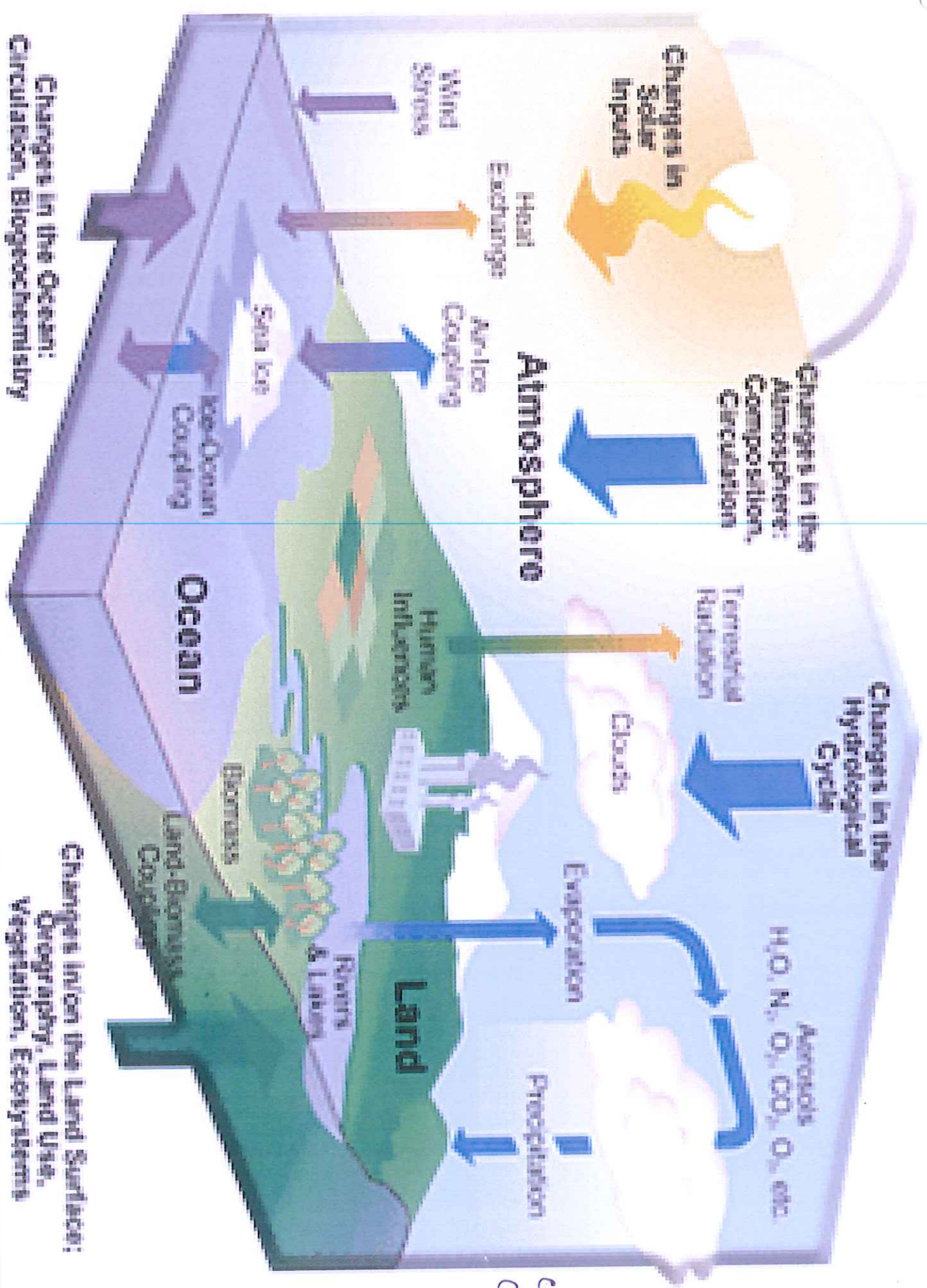
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Note :

1. No cutting or over-writing is allowed. Any cutting or overwriting will lead to rejection of the bid.
2. **If any tax are payable by the contractor to the Government or any other authority it shall not be bidding on MoES to pay any kind of taxes except service tax as applicable paid to the contractor.**
3. The Bid security amount (BSA) amount should be adjusted in the amount of performance guarantee/ performance security which is @ 10% of total value of the contract.
4. **Signature on all the page in TB & FB and all annexure by the bidder along with Company stamp**

# Global Climate System Components

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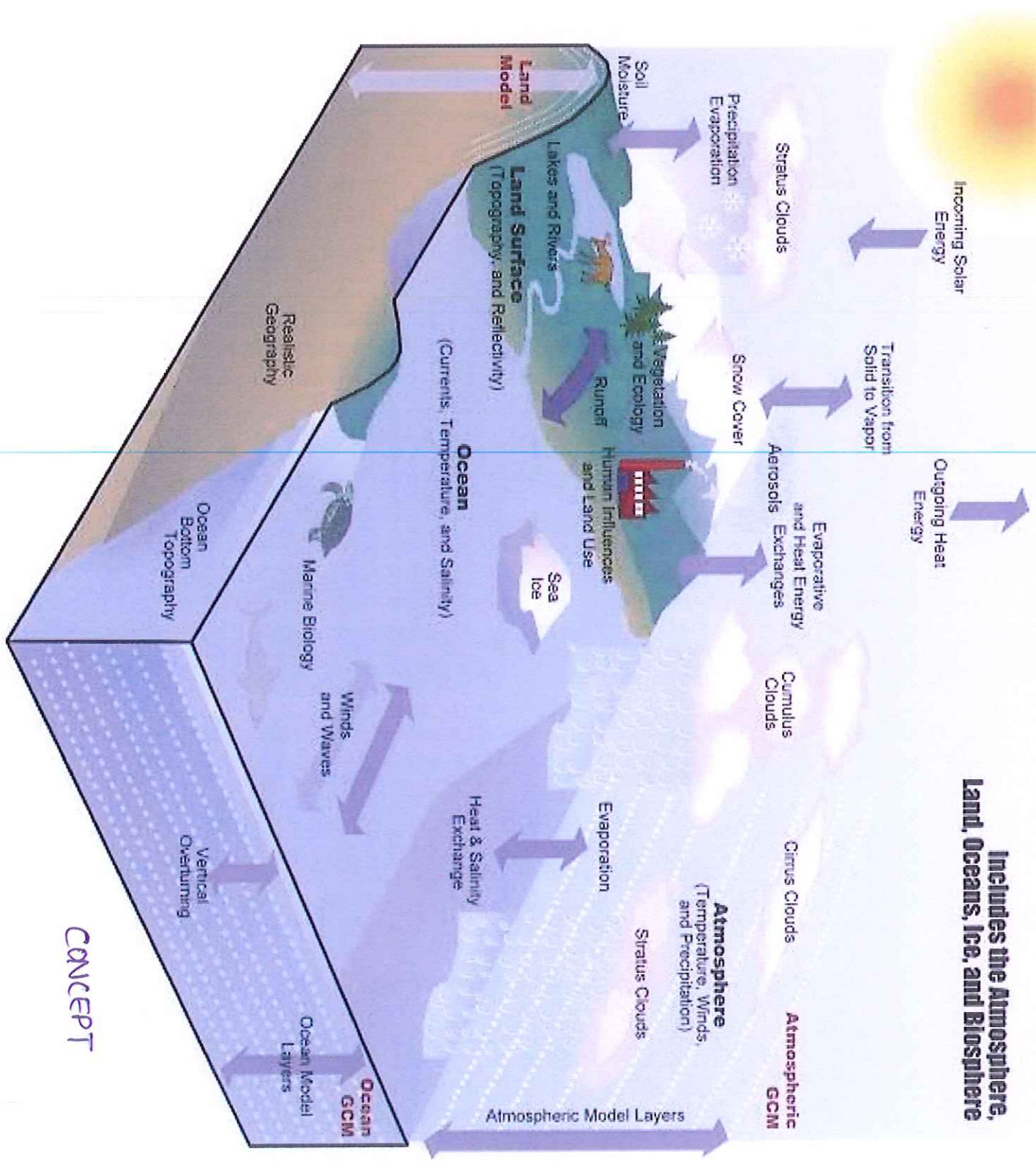


CLIMATE CHANGE



# Modeling the Climate System

Includes the Atmosphere, Land, Oceans, Ice, and Biosphere



CONCEPT



DIORAMA ON ARCTIC

10/129





DIORAMA DE ANTARCTICA



INDIAN  
PERMANENT  
STATION  
"BHARTI" AT  
ANTARCTICA





EMPEROR PENGUIN AT ANTARCTICA



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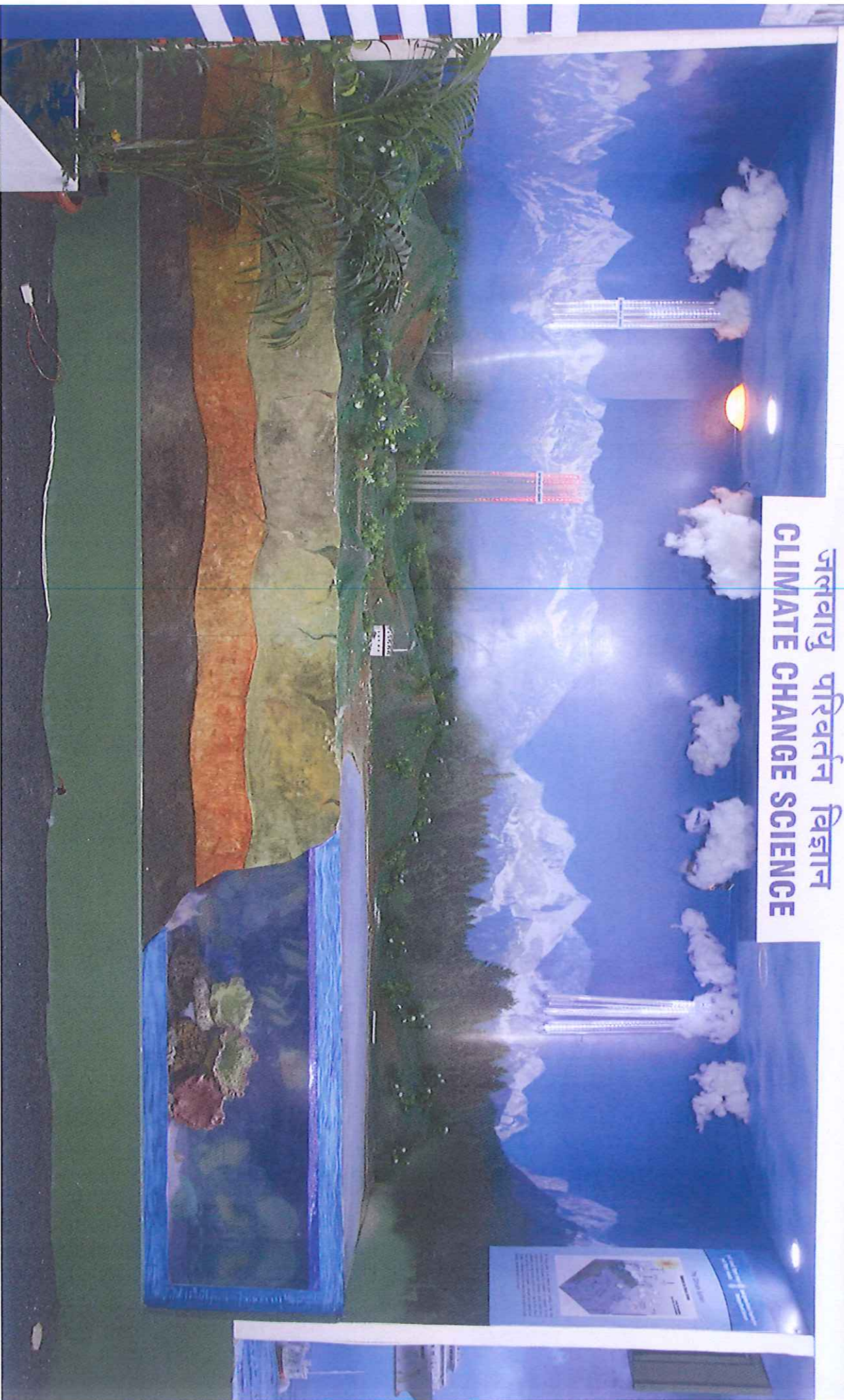




INDIAN PERMANENT STATION "HIMADRI AT ARCTIC"



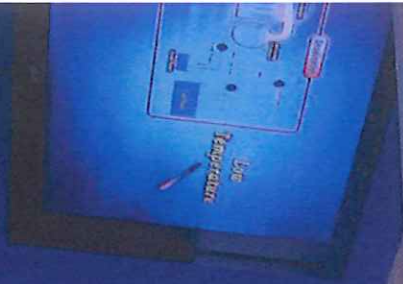
जलवायु परिवर्तन विज्ञान  
CLIMATE CHANGE SCIENCE



DIORAMA ON CLIMATE CHANGE



# DESALINATION



## Desalination

Ministry of Earth Sciences has successfully commissioned the Low Temperature Thermal Desalination Plant (LTTD) at Kavaratti, Minicoy & Agatti which is supplying drinking water with a capacity of 0.1 million liters per day to the local community in Lakshadweep Islands since 2005. The surface sea water at about 28-30 degrees Celsius is sent to a low pressure flash chamber where it instantaneously evaporates under vacuum. The generated vapour is then sent to a condenser where it condenses to water using colder deep sea water at about 12-13 degrees Celsius drawn from a depth of 1000 m.





DESALINATION PLANT DIORAMA OF AGATI ISLAND, LAKSHDWEEP ISLANDS



# AGROMETEOROLGY



DIORAMA ON AGRONOMETEOROLGY "GRAMIN KRISHI MAUSAM VIGYAN SEWA"





ग्रामीण कृषि मौसम विज्ञान सेवा  
 GRAMIN KRISHI MAUSAM VIGYAN SEWA



1E



DIORAMA ON AGROMETEOROLOGY "GRAMIN KRISHI MAUSAM VIGYAN SEWA"

E WATER  
 MADE LINE



ग्रामीण कृषि मौसम सेवा  
GRAMIN KRISHI MAUSAM SEWA



D280 RAMA



# AGRO METEOROLOGY



**Agro Meteorology**

Agro meteorology is the study of the relationship between weather and climate and the growth of crops and animals. It is a branch of meteorology that deals with the application of meteorological knowledge to agriculture.

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**Agro Meteorology**

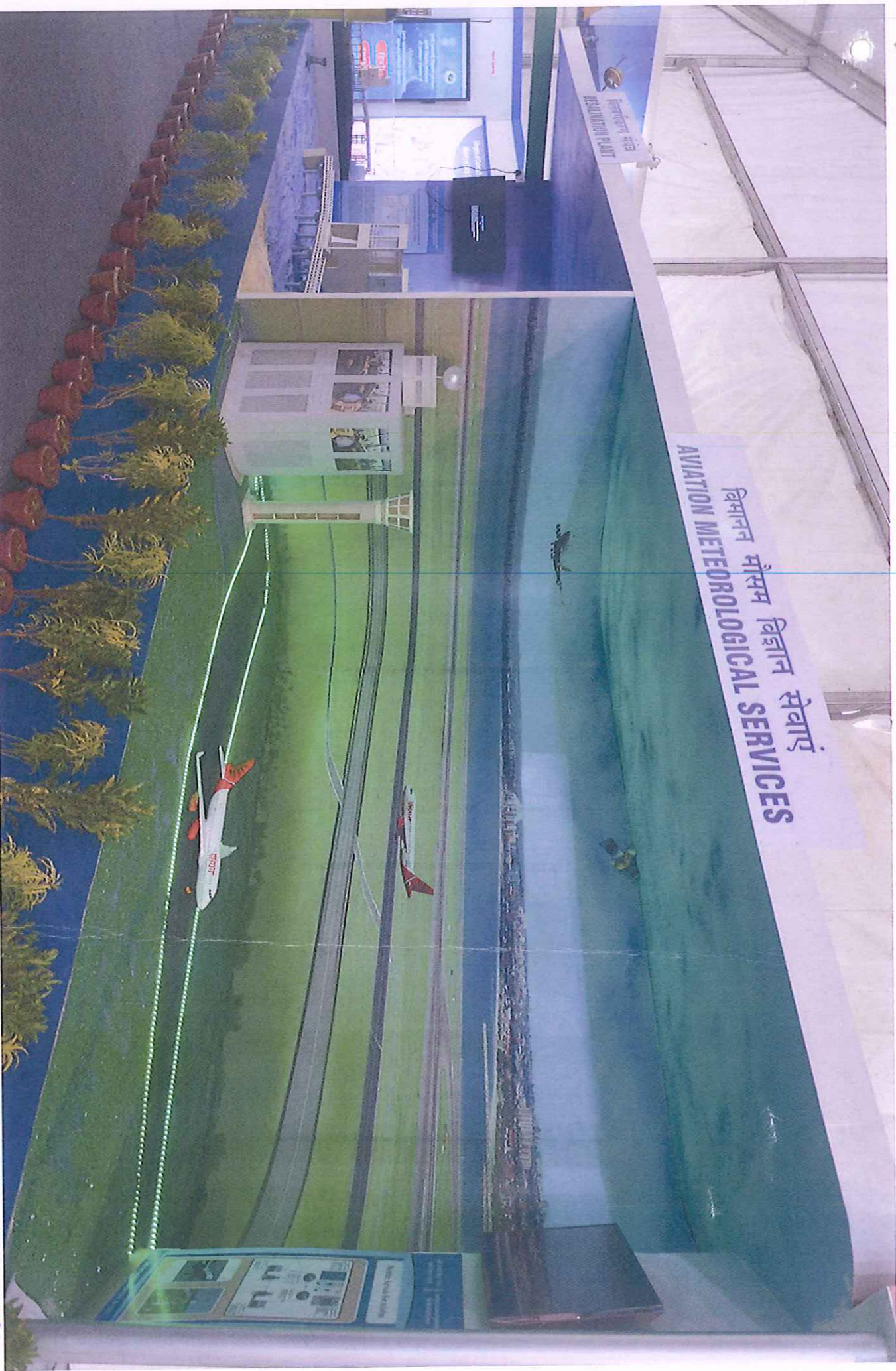
Agro meteorology is the study of the relationship between weather and climate and the growth of crops and animals. It is a branch of meteorology that deals with the application of meteorological knowledge to agriculture.

DIORAMA



विमानन मौसम विज्ञान सेवाएं  
AVIATION METEOROLOGICAL SERVICES

समन्वयक संस्थान  
OPERATIONAL PLANT



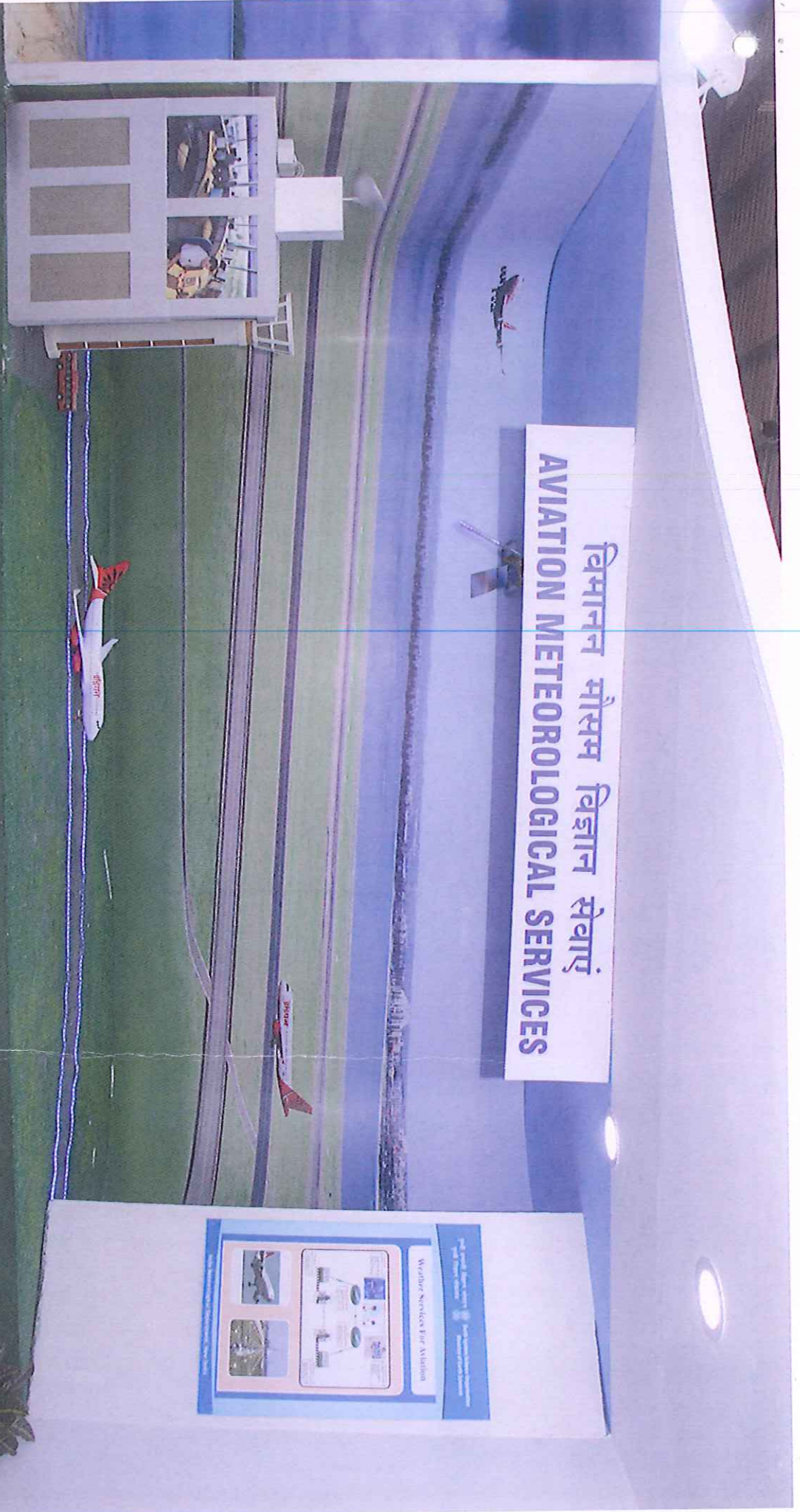
DIORAMA ON AVIATION METEOROLOGICAL SERVICES



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AVIATION METEOROLOGICAL SERVICES

Weather Services For Aviation

The infographic displays several key components of aviation meteorology, including a pilot in a cockpit, a weather radar system, a satellite in orbit, and various ground-based weather instruments and sensors.



DIGI RAMA ON AVIATION METEOROLOGICAL SERVICES

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