REPORT OF THE JOINT COMMITTEE CONSTITUTED BY THE HON'BLE NGT (WZ BENCH, PUNE) IN OA NO. 134 OF 2025 TITLED GULABSINH HARISANG & ORS. Vs. UNION OF INDIA & ORS.

A. Background

Hon'ble NGT (Western Zone Bench, Pune) passed an order dated 19.12.2025 in the matter of Gulabsinh Harisang & Ors. Vs. Union of India & Ors. (OA No. 134 of 2025) related to assessment of the damages caused to the crops of the applicants due to pollution caused by M/s. Ashapura perfoclay Limited, Bhuj. In the said order, Hon'ble NGT constituted a Joint Committee of GPCB, CPCB and District Agriculture Officer, Bhuj and directed the said committee to visit the site in question and submit factual report. GPCB was appointed as Nodal Agency for the Joint Committee. Part of order dated 19.12.2025 passed by the Hon'ble NGT reads;

> *"We deem it appropriate to constitute a Joint Committee comprising one member each of respondent No.3 – Gujarat State Pollution Control Board (GPCB), respondent No. 7 – Central Pollution Control Board (CPCB) and respondent No. 9 – District Agriculture Officer, Bhuj and respondent No.3 –GPCB will be the nodal agency of the said Committee. We direct the Joint Committee to visit the site in question within two weeks and within four weeks thereafter, a report of the Joint Committee shall be submitted by respondent No.3 - GPCB to this Tribunal with respect to the damages caused to the crops of the applicants. The said report of the Joint Committee shall be submitted before us by the GPCB within one month, as directed above, by e-mail at ngt-pune@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF".*

In compliance to the above directions, a Joint Committee of CPCB, GPCB and District Agriculture Officer, Bhuj was constituted. The First meeting of the Joint Committee was organized through Video Conferencing on 19.01.2026 to discuss the approach and scope of works to be carried out. Following members of the Joint Committee were present in the meeting:

1. Dr. N. Semwal – Scientist D, CPCB Regional Directorate, Vadodara.
2. Dr. Kiransinh Vaghela – District Agricultural Officer, Bhuj.
3. Mr. Sumit Chauhan- Regional Officer, GPCB, RO Kutch (West).

It was decided in the meeting that Joint Committee will begin with the inspection of agriculture fields of the applicants and based on the field observations, sampling of soil, ground water and ambient air (particulate matter) shall be decided / collected from applicants farm land and adjoining areas to assess the impact of industrial activity on crops of the applicants. District Agriculture Officer (DAO) Bhuj proposed to invite domain expert from Dantiwada Agriculture University Bhuj to assist in the inspection of agriculture farms of the applicants. The committee agreed with the proposal and requested DAO to coordinate with the university for inviting the expert member.

Subsequently, on 21.01.2026, the Joint Committee along with domain expert from Dantiwada Agricultural University, Bhuj carried out the inspection of the agricultural fields of the applicants. Following officials were present during the visit.

1. Dr. N Semwal – Scientist D, CPCB Regional Directorate, Vadodara.
2. Dr. Kiransinh Vaghela – District Agricultural Officer, Bhuj.
3. Mr. Rajdeepsing Jadeja- Expert from Dantiwada Agricultural University, Bhuj.
4. Mr. Sumit Chauhan- Regional Officer, GPCB, RO Kutch (West).

B. Status and Observations of the Agricultural Fields of the applicants.

Prior to the commencement of the site inspection, the Joint Committee contacted the applicants Mr. Gulabsinh Harisang Rathod and Mr. Naresh Laxman Pindoriya. Subsequently, inspection of agriculture farms was carried out in the presence of both applicants.

i) **Observation on Mr. Naresh Laxman Pindoriya agricultural farm land:** The agriculture farm of Mr. Naresh Pindoriya is situated in the East side of M/s Ashapura Perfoclay Ltd. at about 300-meter distance. During visit, it is observed that four major horticulture crops namely pomegranate, dragon fruit, dates and wheat are being cultivated in the farm land of Mr. Pindoriya. The committee noted that an unpaved (kachha) village road is passing adjacent to Mr. Pindoriya's farm. This road is reportedly frequently used by M/s. Ashapura Perfoclay Limited for transporting raw materials and finished products. The committee observed significant dust deposition on the crops nearest to the road and comparatively lesser dust on crops away from the road side, thus the dust deposition on crops near the road may primarily be attributed to heavy vehicular movement on the kachha (unpaved) road. High dust deposition may hinder photosynthesis process in the plants and thus can affect growth and yield of crops. Further, as per physical observations of agriculture expert, normal growth and development were observed in horticultural crops such as pomegranate, date palm and dragon fruit. At present, the pomegranate crop was found to be at the fruiting stage and the expected yield appears to be normal. As per agricultural expert opinion, 20 to 25 numbers of fruit per tree is considered as normal yield. Photographs taken during the visit are given below.

Dusting observed on road adjacent to applicant Mr. Naresh Pindoriya's farm due to vehicular movement (Photograph Taken From Naresh Pindoriya's farm)

Kachha Road passing adjacent to applicant Mr. Naresh Pindoriya's farm

Heavy dust observed on plants growing adjacent to the kachha road

Pomegranate crop in applicant farm

Pomegranate crop in applicant farm

Wheat cultivation in the farm land of applicant

Dates and dragon fruit cultivation in the farm land of applicant

ii) **Observation on Mr. Gulabsinh Harisang Rathod's agricultural farm:** The agriculture farm of second applicant Mr. Gulabsinh Rathod is situated adjacent to premises of M/s Ashapura Perfoclay's in east direction. During visit, it is observed that three major cereal crops namely Wheat, Maize and Mustard are being cultivated in the farm land of Mr. Gulabsinh Rathod. It was observed that while the wheat and mustard crops have progressed to fruiting stage, the maize plants are still in their growth phase.

Though dust was observed on the crops, however, as per agriculture expert opinion, physical appearance of all three cereal crops are exhibiting normal growth and development. As per the Report of Directorate of Agriculture – "District Wise Area, Production and Yield of Important Food and Non-Food crop in Gujarat State" Govt. of Gujarat, 2858.91 kg/Ha for Wheat, 2007.84 kg/Ha for Mustard & 1880.71 kg/Ha for castor crop production is considered as average yield in Kutch District. Photographs taken during the visit are given below.

Maize and wheat cultivation in the farm land of applicant

Mustard cultivation in the farm land of applicant and location of M/s Ashapura in other side of farm land

Close view of mustard crop

C. Sampling / Monitoring of Soil, Ambient Air Quality and Ground Water

i) **Soil sampling and records of field observation (Rojkam):** During site visit of agricultural farms of the applicants on 21.01.2026, four soil samples were collected from different locations. After conducting the physical survey of agriculture farms of both the applicants, day's observations of the Joint Committee (Rojkam) were recorded in the field itself. The same is attached as **Annexure-1.**

ii) **Ambient air quality monitoring:** Considering the nature of manufacturing process at M/s Ashapura Pefoclay Ltd., which majorly comprises handling / processing of bentonite clay and coal, the Joint Committee decided to carry out sampling of dust particles (PM_{10}) in the ambient air to ascertain contribution of dust emissions from M/s Ashapura Pefoclay Ltd. in the surrounding environment and especially in the agriculture fields of the applicants. Based on availability of facilities, suitability of location and keeping in view, predominant wind direction, following three locations were selected for the ambient air quality monitoring.

Table-1: AAQM locations

S.N.	Location	Coordinates
1	Farm of Mr. Gulabsinh Rathod (Applicant)	23°11'57.9"N, 69°44'50.1"E
2	At Gate No. 2 (Used for entry & exit of heavy vehicles) of M/s Ashapura Perfoclay Ltd.	23°11'56.6"N, 69°44'28.4"E
3	In the premises of Dream Resort (as reference location, about 1.2 Km in the Up Stream direction)	23°12'57.7"N, 69°44'32.2"E

Ambient air monitoring was carried out on above three locations from early morning till afternoon for 8 hours on 22.01.2026 based on availability of electricity in the farm of the applicant.

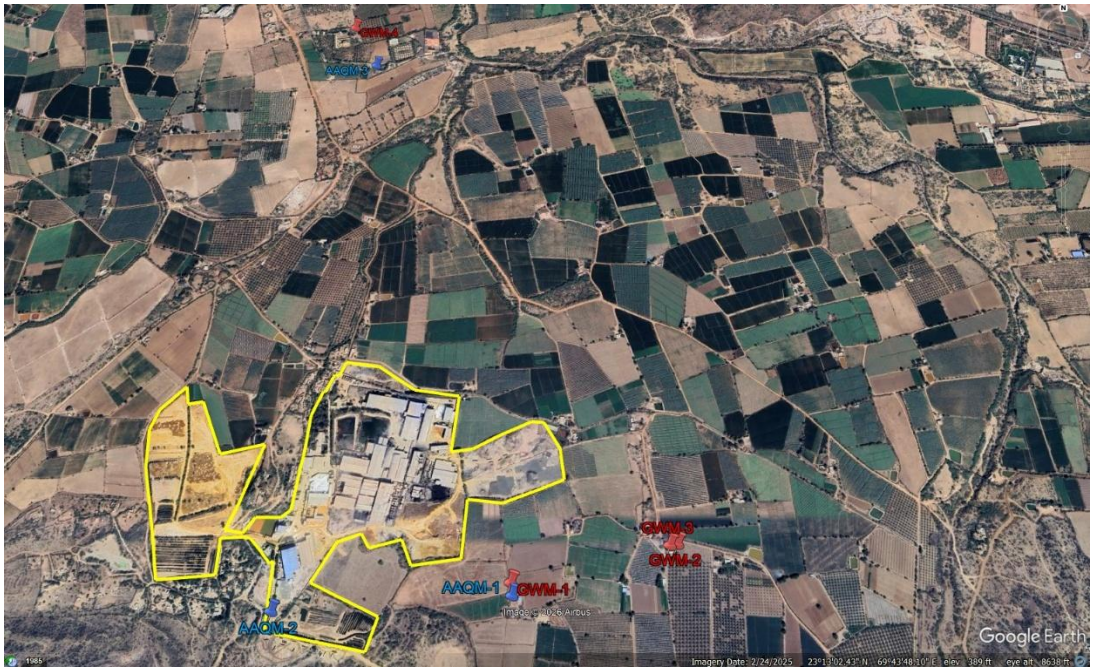
iii) **Ground water sampling:**

Ground water samples were collected from borewells situated in agriculture farms of both the applicants and one reference sample was collected from opposite side of applicants agriculture farms. The detail of the ground water monitoring locations is as follows:

Table-2: Ground water sampling locations

Sr. No.	Location	Coordinates
1	Borewell of Gulabsinh Harisang Rathod	23°11'59"N, 69°44'50"E
2	Borewell-1 of Naresh Pindoriya's farm	23°12'02.3"N, 69°45'05.5"E
3	Borewell- 2 of Naresh Pindoriya's Farm	23°12'02.2"N, 69°45'04.8"E
4	Borewell situated in Dream Resort Premises (Reference sample)	23°13'03.7"N, 69°44'29"E

The Google image depicting locations of ambient air quality monitoring stations (blue colour), groundwater monitoring locations (red colour) and premises of unit in question i.e. M/s. Ashapura perfoclay Ltd. (yellow colour) is given below;



AAQM station, GW location and premises of M/s Ashapura Perfoclay Ltd.

D. Result and discussion

i) **Ambient Air Quality Monitoring:** The Analysis results of ambient air quality sampling carried out at three locations is given in the table below:

Table-3: Analysis results of ambient air quality monitoring

Sr. No.	Parameter	Unit	Sampling Locations of AAQM		
			Applicant Mr. Gulabsinh's Farm	Gate No. 2 of M/s Ashapura Perfoclay Ltd.	Dream Resort Premises (upwind reference location)
1.	PM_{10}	$\mu g/m^3$	167	256	196

The PM_{10} concentration in ambient air is found higher on all three locations considering National Ambient Air Quality Standard for PM_{10} which is 100 $\mu g/M^3$ (24 hour TWA). It indicates that the PM_{10} levels are generally higher in the ambient air of the area, which may be attributed largely to the unpaved (kachha) roads in the area. Further, maximum PM_{10} concentration was found at Gate No. 2 of M/s Ashapura Perfoclay Ltd. indicating potential source of PM_{10} from the industry. Thus, considering the vicinity of agriculture farms of applicants to the industry, possibility of dust (PM_{10}) emanating from the industry reaching to the farms of applicants cannot be ruled out.

ii) **Ground Water Monitoring:** Ground water samples were collected from agriculture farms of both the applicants and one reference sample from premises of Dream Resort located

opposite side of the agriculture farms in north direction at about 1.4 Km away from the industry to observe the status of contamination, if any. The analysis results are given in the table below.

Table-4: Analysis results of ground water monitoring:

S. N.	Parameter	Unit	Sampling Locations				
			Location -1 Gulabsinh's Farm	**Location-2 Naresh Pindoriya's Farm - 1**	**Location-3 Naresh Pindoriya's Farm - 2**	**Location-4 Dream Resort Premises (Reference location)**	**Drinking water standards (IS 10500)**
1.	pH		7.42	7.72	7.36	8.12	**6.5- 8.5**
2.	Conductivity	µS/cm	7380	6750	5480	4730	**--**
3.	Total Dissolved solid	mg/l	**5040**	**4540**	**3564**	**3024**	**500*/2000****
4.	Ammoniacal Nitrogen	mg/l	**2.80**	**2.24**	**1.68**	**1.68**	**0.5**
5.	Nitrite	mg/l	1.18	0 .95	1.18	0.74	**--**
6.	Nitrate	mg/l	2.30	2.2	1.51	1.25	**45**
7.	Alkalinity as CaCO3	mg/l	340	230	210	160	**200*/600****
8.	Total Hardness CaCO3	mg/l	**2900**	**2000**	**1700**	**1200**	**200*/600****
9.	Sodium	mg/l	42.4	27.18	20.87	10.87	**--**
10.	Potassium	mg/l	0.2	0.2	0.2	0.2	**--**
11.	Calcium	mg/l	39.2	29.5	17.68	15.71	**75*/200****
12.	Magnesium	mg/l	18	10	16	8	**30*/100****
13.	Percent Sodium	% Na	45.7	40.8	38.2	31.4	**--**
14.	Chloride	mg/l	**1900**	**1740**	**1500**	**1180**	**250*/1000****
15.	Sulphate	mg/l	**1000**	**910**	**880**	**740**	**200*/400****
16.	Sodium Absorption Ratio (SAR)	SAR	7.92	6.12	5.08	3.16	**---**

Requirement (Acceptable limit), **Permissible limit

The above analysis results when compared with BIS Drinking Water Standards IS 10500:2012, shows that the groundwater quality across all four locations (including the reference location) is not fit for drinking purpose. Thus it can be inferred that ground water quality of the area concerned is in general not fit for drinking purpose. It is gathered that GPCB had carried out ground water survey of the village ler & Kukma of Bhuj area in the year 2019-20 and declared that the ground water quality is unfit for drinking considering high TDS and Ammoniacal Nitrogen. GPCB had also issued public notice in this regard in local newspaper “Kutch Mitra” and leading national newspaper “Indian Express” in February 2020. Further, when compared to Designated Best Use Water Quality Criteria of CPCB for irrigation purpose, pH and SAR are observed within the specified criteria, however, Electrical Conductivity is significantly higher than the criteria of 2250 micro mhos / cm. As per agriculture expert opinion, this type of high salinity water quality is suitable for Wheat, Mustard, Date Palm, Pomegranate, Castor crops.

The analysis results show comparatively higher concentrations of conductivity, TDS, Nitrogen compounds, Alkalinity, Total Hardness, Sodium, Calcium, Magnesium, Percent Sodium, Chloride and SAR at Mr. Gulabsinh's farm followed by Mr. Pindoriya's farm and lowest at the Dream Resort premises (reference location). These elevated levels, suggest that the contamination likely stems from either industrial operations or fertilizer application on agricultural lands.

iii) Soil Analysis: Four soil samples (two from top soil and two from lower soil) were collected from the agriculture farm of applicant Mr. Naresh Pindoriya and his wife Mrs. Jasuben Naresh Pindoriya. Date palm and dragon fruit are being cultivated in the agricultural farm of Jashuben Naresh Pindoriya (S. No. 178, ler) and Pomegranate crop is being cultivated in the agricultural field of Naresh Pindoriya (S. No. 177/1, ler). The analysis report of soil samples is given in the table below.

Table-5: Analysis Results of Soil monitoring from the agriculture farm

Sr. No.	Parameter	Unit	Locations			
			From Naresh Pindoriya's farm		From Jashuben Naresh Pindoriya's farm	
			S-1 (Upper Soil)	S-2 (Lower Soil)	S-3 (Upper Soil)	S-4 (Lower Soil)
1	pH	pH unit	8.26	8.29	8.33	8.4
2	EC	m mho/cm	0.38	0.28	0.29	0.24
3	Organic Carbon	%	0.78	0.9	0.78	0.64
4	Phosphorous	Kg/Ha	32	20	20	18
5	Potash	Kg/Ha	281	266	326	379

The analysis results show that the soil characteristic is alkaline on all four locations. Electrical conductivity is found normal and organic carbon is at moderate levels. The soil samples collected from Naresh pindoriya's farm shows Nitrogen (Considering and comparing the Organic Carbon value) and phosphorus deficiency. The soil is suitable for date palms, as date palms grow well even in alkaline soils. Nitrogen and phosphorus deficiency can affect growth and yield. Thus for better yield, use of appropriate nutrient rich fertilizers / additives may be considered by the applicants. The Potash concentration is found at Normal level.

E. Observations about the Industry – M/s. Ashapura Perfoclay Ltd.

The CPCB and GPCB officials visited the unit M/s Ashapura Perfoclay Ltd. on 22.01.2026 to observe the present operational status and associated pollution control management of the unit. Following are the observations:

a) The unit is engaged in manufacturing of bleaching earth through processing (acid activation) of bentonite clay mineral. The process flow diagram is as follows:

Bentonite clay → Crushing → Granulation (water sprinkling)→Acid activation (using 35% sulphuric acid at 85^{0}C) → Drying → Milling → Packing

b) The unit has provided four production lines, designated as Production line 3 to 6. Each production line comprises of above manufacturing process. During visit all four production lines were in operation.

c) M/s Ashapura Perfoclay Ltd. has obtained Consolidated Consent & Authorization (CC&A) form GPCB for production of bleaching earth vide consent order no. AWH-126060 which is valid to 24/06/2028.

d) Air pollution related observations: The unit is handling bentonite clay, coal, sulphuric acid and lime at large scale. The manufacturing process associates point source emission as well as fugitive emission sources.

- **Point source emission sources:** Stack / vent attached to boiler, dryers and pulverizers. Unit is using coal as fuel in Boiler & dryers. Air pre-heater, Multi Cyclone Separator, Bag Filter and Water Scrubber is installed as Air Pollution Control System (APCS). with boiler. Cyclone Separator, Bag Filter and Water Scrubber is attached as with each dryer as APCS. Further, Cyclone separator and bag filter is installed with Pulverisers.
- **Fugitive emission sources:** Crushers, acid activation vessels, dryers, coal milling, coal handling (storage area & boiler feed area) are potential source of fugitive emissions. Besides, these process related activities, heavy vehicular movement inside and outside the premises wherein certain portion of roads are unpaved is a potential dust emission source.
- During visit, significant fugitive emissions was observed in crusher feed zone, acid activation area and coal storage area. Dust emanating from vehicular movement was also observed. The unit was instructed to provide appropriate dust control measures in all these areas on priority. Regular water sprinkling on roads is warranted in order to suppress the dusting from vehicular movement.

e) Wastewater Management: Wastewater is mainly generated from acid activation process of Bentonite Clay, blow-down from cooling tower etc. The unit has provided Effluent Treatment Plant (ETP) to treat the wastewater. The ETP consisting of collection tanks cum neutralization tanks, intermediate storage tanks, clarifier, filter press, sand filters, Ultrafiltration plant, RO plant and Solar evaporation pond for treatment of generated wastewater. Permeate water generated from RO is utilized in manufacturing process and RO Reject is sent to solar evaporation pond. The RO reject from the Solar Evaporation Pond is taken into 3 Stage MEE followed by ATFD. The MEE Condensate reused in process and MEE & ATFD salt is disposed to TSDF. During visit, ETP was operational & no wastewater discharge outside the premises was observed.

F. CONCLUSION

a) **Observations about agriculture crops:** During visit, agriculture farms of both applicants were observed under cultivation. Cultivation of horticulture crops like pomegranate, date palm and dragon fruit were observed in agriculture farms of one of the applicant Mr. Naresh Pindoriya. Whereas, cultivation of cereal crops like wheat, maize and mustered was observed in the agriculture farms of other applicant Mr. Gulabsinh Harisang Rathod. As per observations of agriculture expert, normal growth and development is observed in all the cultivated crops. Further, considering yield data of Directorate of Agriculture, Govt. of Gujarat for kutch district and field observation of agricultural expert, the expected yield of fruiting crops such as pomegranate wheat and mustard appears normal.

Though, normal growth and development is observed in all the cultivated crops, however, dust deposition was observed on all the crops during the site visit. Significant dust deposition was observed on crops adjoining the kacha (unpaved) road and comparatively lesser dust on crops away from the kachha road. The kachha road is reportedly frequently used by M/s. Ashapura Perfoclay Limited for transporting raw materials and finished products. Agriculture farms of Mr. Gulabsinh Harisang Rathod are in the close vicinity from premises of M/s Ashapura Perfoclay Ltd. and dusting was observed on the crops in these farms. Ambient air quality results show highest PM_{10} concentration at the boundary gate of the unit, which shows significant dust emission from the unit premises. Thus it can be concluded that potential sources of dust are kacha (unpaved) roads passing adjacent to the farm lands and fugitive emissions from industry M/s Ashapura Perfoclay Ltd.

b) **Ground water quality in the area:** The ground water analysis results when compared with BIS Drinking Water Standards IS 10500:2012, shows that the groundwater quality across all four monitored locations (including the reference location) is not fit for drinking purpose. Thus it can be inferred that ground water quality of the area concerned is in general not fit for drinking purpose. Further, when compared to Designated Best Use Water Quality Criteria of CPCB for irrigation purpose, pH and SAR are observed within the specified criteria, however, Electrical Conductivity is significantly higher than the criteria of 2250 micro mhos / cm. As per agriculture expert opinion, this type of high salinity water quality is suitable for Wheat, Mustard, Date Palm, Pomegranate, Castor crops.

The analysis results show comparatively higher concentrations of conductivity, TDS, Nitrogen compounds, Alkalinity, Total Hardness, Sodium, Calcium, Magnicium, Percent Sodium, Chloride and SAR at Mr. Gulabsinh's farm followed by Mr. Pindoriya's farm and lowest at the Dream Resort premises (reference location). These elevated levels, suggest that the contamination likely stems from either industrial operations or fertilizer application on agricultural lands.

c) **Soil analysis:** The analysis result of soil samples for monitored parameters does not exhibit any significant direct impact on soil characteristics due to industry operation.

d) **Observation about industry:** Significant fugitive emissions were observed in crusher feed zone, acid activation area and coal storage area of M/s Ashapura Perfoclay Ltd. Further, significant dust deposition on internal roads of the unit making it a potential source of dust emissions during vehicular movement as well as during high wind condition. Thus, industrial operation and associated activities are potential source of fugitive dust emissions in the nearby area.

G. Recommendations

Although there was no significant impact observed on the growth / yield of agriculture crops of the applicants, however, the unit M/s Ashapura Perfoclay Ltd. needs to address issue of fugitive dust emissions on priority. Adequate dust control measures needs to be installed in crushers, acid activation reactors and coal storage area. Regular dust cleaning from internal roads followed by water sprinkling is required to be undertaken by the unit. The unit should also carry out regular water sprinkling on nearby kachha roads which are exclusively used by them for transportation of materials. The goods (bentonite clay, bleaching clay, coal etc.) transportation vehicles should be properly covered to avoid any possibility of dust emission during movement.

M/s Ashapura Perfoclay Ltd. should properly operate and maintain the air pollution control system attached with the point source emission. GPCB should keep watch on stack emissions for compliance of prescribed norms.

Date of Visit: 21.01.2026 & 22.01.2026

(Sumit Chauhan) Regional Officer, GPCB, RO Kutch (West)	(Dr. Kiransinh Vaghela) District Agricultural Officer, Bhuj	(Dr. N Semwal) Scientist D, CPCB Regional Directorate, Vadodara

Photographs taken during the visit:

Sampling location (1) for ambient air quality at applicant Mr. Gulabsinh's Farm

Sampling location (2) for ambient air quality at Gate No.2 of M/s Ashapura Perfoclay

Sampling location (3) for ambient air quality at Dream Resort

Adjacent Kacha Road passing adjacent to Naresh Pindoriya's farm

Gulabsinh’s Farm

Photograph Taken From Naresh Pindoriya's farm

Photograph Taken from Naresh Pindoriya's farm

Naresh Pindoriya's farm

Annexure-1-Rojkam (English translated)

Visit Minutes

Place: Ler
Date: 21/01/2026

Today, as per the details given below, a joint team visited Ler village. The team comprised (1) Dr. N. Semwal (Scientist-D), CPCB, Vadodara; (2) Mr. Sumit Chauhan (Regional Officer), GPCB, Regional Office Kachchh West; (3) Mr. Kiransingh Vaghela (District Agriculture Officer, Bhuj–Kachchh); (4) Mr. P. K. Patel (Deputy Director of Agriculture [Extension], Bhuj); and (5) Dr. R. M. Jadeja (Associate Research Scientist, Regional Research Centre – SDAU, Bhachau). Through the joint team, a visit was made to the fields of farmers (1) Rathod Gulabsinh Harisinghji, (2) Naresh Lakhman Pindoriya, and (3) Jashuben Naresh Pindoriya between 16:30 hrs to 18:30 hrs. During the visit, all crops cultivated in their respective fields / survey numbers were inspected. During the inspection, dust was observed on all the crops. The colour of the dust (particulate matter) observed was different from the colour of the soil. Further, in horticultural crops such as pomegranate, date palm, and dragon fruit, normal growth and development were observed. At present, the pomegranate crop was found to be at the fruiting stage, and based on the number of fruits, the expected yield appears to be normal. Similarly, during the visit to the field of Mr. Rathod Gulabsinh Harisinghji, cultivation of wheat and mustard was observed, along with maize grown on the field bunds. Dust was observed on the leaves of maize and mustard crops. While assessing the crop production status, based on the number of wheat tillers and the number of mustard pods, the expected yield appears to be average to normal. The farmer, Mr. Rathod Gulabsinh Harisinghji, informed that castor crop had been cultivated in the previous year in the field where wheat is currently grown. He further stated that a yield of 2,570 kg/ha of castor (variety GCH-2) was obtained, which is equal to the average yield of the area. Thereafter, in the presence of the committee members and farmers, and through Mr. Ankit A. Madam, Gram Sevak, Ler, a total of four soil samples were collected following the zig-zag method. All the samples were collected from the fields of Mr. Nareshbhai Pindoriya and Mrs. Jashuben N. Pindoriya. Further, as irrigation had been applied in the field of Mr. Rathod Gulabsinh, soil samples could not be collected from his field. The collected soil samples will be analysed at the Soil Testing Laboratory, Bhuj for EC, pH, OC, and N-P-K parameters; however, analysis related to pollution will not be possible.

Furthermore, after discussion with the agricultural scientists, it was concluded that the deposition of dust (particulate matter) on the leaves could potentially interfere with or reduce the process of photosynthesis. If such interference or reduction in photosynthesis occurs, there is a possibility of a 10 -15% decrease in crop yield.

Sr. No.	Farmer Name
1	Nareshbhai Lakhmanbhai Pindoriya
2	Gulabsinh Harisangji Rathod
3	Jashuben Nareshbhai Pindoriya

Witness

1. Shri K. V. Patel (Assistant Director of Agriculture)
2. Shri S. M. Prajapati (Assistant Director of Agriculture)
3. Shri C. D. Thakor (Assistant Director of Agriculture)
4. Shri D. M. Jadeja (Extension Officer)
5. Shri N. A. Patel (Extension Officer)
6. Shri A. A. Madam (Gramsevak)

Present Committee Mambers

1. Dr. N. Semwal
2. Shri Sumit Chauhan
3. Dr. K. O. Vaghela
4. Shri P. K. Patel
5. Dr. R. M.Jadeja

રોજકામ

સ્થળ :- લેર
તા :- 21/01/2026

આજ રોજ નીચેની વીગતે સંયુક્ત ટીમશ્રી મારફતે લેર ગામ ખાતે (1) ડૉ. એન. સેમવાલ (વૈજ્ઞાનીક-ડી.) - CPCB - વડોદરા - (2) સુમીત ચૌહાણ (પ્રાદેશીક અધિકારી - GPCB - પ્રા.ક. કચ્છ પશ્ચીમ. - (3) કિરણસિંહ વાઘેલા (મુલ્યાં ખેતીવાડી અધિકારીશ્રી - ભુજ-કચ્છ.) (4) મી. કે. પટેલ (નાયબ ખેત નિયામકશ્રી (વિસ્તરણ) - ભુજ. (5) ડૉ. આર. એમ. મકવાણા (સહ-સંશોધન વૈજ્ઞાનિક (વિ./સંશોધન કેન્દ્ર - સ.કૃ.યુ. લચાઉ ની ટીમ મારફતે ખેડુતશ્રી (1) રાઠોડ ગુલાબસિંહ હરિસંગજી (2) નરેશ લખમણ પિંડોરીયા અને (3) જશુભાઈ નરેશ પિંડોરીયા ના ખેતરની મુલાકાત 15:30 થી 17:30 દરમિયાન કરવામા આવેલ હતી જે મુલાકાત દરમિયાન સંયુક્ત ટીમ મારફતે તેમોના ખેતર/સર્વે નં માં વાવેતર કરેલ તમામ પાકોનું નિરિક્ષણ કરવામાં આવેલ છે. નિરિક્ષણ દરમિયાન તમામ પાકો પર ડસ્ટ જેવા મળેલ છે જે ડસ્ટ (રજકણોના) કલર જમીનના કલરથી અલગ પ્રકારનો જેવા મળેલ છે વધુમાં બાગાયતી પાકો જેવા કે દાડમ, ખારેક, ક્રેગન ફ્રુટ પાકોમાં વૃધ્ધિ-વિકાસ સામાન્ય જેવા મળેલ છે તેમજ દાલમા દાડમ પાકમાં ફુલની અવસ્થા જેવા મળેલ છે જેમા ફુલની સંખ્યા ~~ના~~ આધારે ઉત્પાદન સામાન્ય થશે એવું અંદાજે જણાય છે. તેજ રીતે રાઠોડ ગુલાબસિંહ હરિસંગજી ના ખેતરની મુલાકાત લેતા ઘઉ, રાઇડો અને શેઢા પાળા પર મકાઇનું વાવેતર જેવા મળેલ જેમા મકાઈ અને રાઈડાના પાકના પાંદડા પર ડસ્ટ જેવા મળેલ છે. પાક ઉત્પાદન પરિસ્થીતીની તપાસ કરતા ઘઉની ડુંડીઓની સંખ્યા તથા રાઈડાના સીંગોની સંખ્યા જોતા ઉત્પાદન સરેશરા ~~સરેરાશ~~ સામાન્ય થશે એવો અંદાજે જણાઈ છે. જે ખેતરમાં ઘઉં વાવેલા છે તેમા બાગલા વર્ગમાં દિવેલાનું પાકનું વાવેતર કરેલ હતું તેમ ખેડુતશ્રી રાઠોડ ગુલાબસિંહ હરિસંગજી દ્વારા જણાવેલ. વધુમાં તેણે ઉત્પાદનમાં 2570 કિલો/હે. દિવેલા GCH-2 માં મળેલ છે જે વિસ્તારના સરેરાશ ઉત્પાદન જેટલું છે. ત્યારબાદ અંકિત ચૌ. મારફતે ગ્રામસેવક-લેર મારફતે કમીટીની હાજરી તેમજ ખેડુતોની હાજરીમાં કુલ 4 જમીનના નમુનો

P.T.O

ઝીગ-ઝેગ મેથડ અનુસાર લેવામા આવેલ હતા જે તમામ નમુના શ્રી નરેશભાઈ ચિંડોરીયા તથા જશુબેન એન. ચીંડોરીયાના ખેતરમાંથી લેવામાં આવેલ હતા. વધુમાં શ્રી રાઠોડ ગુલાબસિંહ ના ખેતરમાં વિવાદ કરેલ હોવાથી માટીનો નમુનો લઈ શકાય તેમ ન હતો સદર નમુના જમીન ચકાસણી પ્રયોગશાળા-ભુજ ખાતે મોકલી આપવામા આવશે જ્યાં EC, Ph, OC, N-P-K નું પૃથક્કરણ થશે પરંતુ પ્રદુષણ બાબતનું પૃથ્થકરણ થઈ શકશે નહિ.

વધુમા કૃષિ વૈજ્ઞાનિકો સાથે ચર્ચા કરતા એવું નિષ્કર્ષણ કાઢવામા આવ્યું કે પાંદડાઓ ઉપર ડસ્ટ (રજકણો) પડવાથી પ્રકાશસંશ્લેષણની ક્રિયા માં વિક્ષેપ/ધાબો પડવાની શક્યતા નકારી શકાશે નહિ. જો આવી પ્રકાશસંશ્લેષણની ક્રિયામાં વિક્ષેપ/ધાબો પડે તો પાકોના ઉત્પાદનમાં 10-15% જેટલો ઘટાડો થઈ શકવાની સંભાવના રહેલી છે.

ક્રમ	ખેડુતનું નામ	સહિ
①	નરેશભાઈ લખમણભાઈ ચીંડોરીયા	- નરેશ લખમણ ચાંડોરીયા
②	ગુલાબસિંહ હરિસંગજી રાઠોડ	- રાઠોડ ગુલાબસિંહ એચ
③	જશુબેન નરેશભાઈ ચીંડોરીયા (તેમના પ્રતિનિધી/પતિ શ્રી)	- નરેશ લખમણ ચાંડોરીયા

હાજર રહેલ કમીટી મેમ્બરોની સહિ.

① ડૉ. એન. એમ. સંભવાલ :- [signature]
② સુમિત ચૌહાણ :- [signature]
③ ડૉ. ડી. આ. વાઘેલા :- [signature]
④ ડૉ. જી. ડી. પટેલ :- [signature]
⑤ ડૉ. આર. એમ. મકેજ :- [signature]

અન્ય સાક્ષીઓ

1) કે. બી. પટેલ (અમે.ના) - [signature]
2) એસ. એમ. પ્રજાપતી (અમે.ના) - [signature]
3) સી. ડી. ઠાકોર (અમે.ના) - [signature]
4) ડી. એમ. મકેજ (વિસ્તરણ.અ.) - [signature]
5) એન. બી. પટેલ (વિ.અ.) - [signature]
6) બી. બી. માકમ (ગ્રામસેવક) - [signature]
7) [illegible]