

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
Principal Bench, New Delhi**

I.A. No. 30/2020

(For modification/recall of order dated 24.6.2020)

In

Original Application No. 43/2020(EZ)

In the Matter of: -

Bonani Kakkar

Applicant(s)

Versus

Oil India Limited & Ors.

Respondent(s)

AND

I.A. No. 31/2020 (For modification/recall of order dated 24.6.2020)

In

Original Application No. 44/2020(EZ)

Wildlife and Environment Conservation Organisation

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

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(Dr. Prashant Gargava)

Member Secretary

Central Pollution Control Board,

Parivesh Bhawan, East Arjun Nagar,

Delhi-110032

Place: Delhi

Date: 24th July, 2020



PRELIMINARY REPORT

of

**The Committee of Experts constituted by the Hon'ble National Green Tribunal,
Principal Bench, New Delhi**

headed by

JUSTICE BROJENDRA PRASAD KATAKEY, FORMER JUDGE,
GAUHATI HIGH COURT, GUWAHATI

Submitted to

**THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW
DELHI**

ON 24.07.2020

(VOL. I)

Constituted vide Order dated 24.06.2020 in O.A No. 43/2020/EZ and O.A No.44/2020/EZ to look into
issues concerning Well Baghjan -5 in Tinsukia, Assam.

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Chapter – I

A. INTRODUCTION

1. The Constitution of this Committee of Experts by the Hon'ble National Green Tribunal, Principal Bench, New Delhi (hereinafter referred to as the Hon'ble NGT) is in response to the blowout on 27.05.2020 and subsequent explosion on 09.06.2020 at an Oil India Limited (hereinafter referred to as OIL) well in Baghjan (hereinafter referred to as Well Baghjan-5), located in the district of Tinsukia, in the State of Assam, India.

2. The Order dated 24.06.2020, constituting the Committee of Experts was passed in O.A No.43/2020/EZ titled Bonani Kakkar -Vs- Oil India Limited & Ors. and O.A No.44/2020/EZ titled Wild Life and Environment Conservation Organisations -Vs- Union of India & Ors. The Applications *inter-alia* raise allegations of failure and negligence on part of Respondent Authorities including OIL in preventing the blowout and mitigating its impact. In both these applications, the Hon'ble NGT was satisfied that substantial questions relating to the environment were involved and therefore, called for consideration by the Hon'ble NGT under Sections 14 and 15 of the National Green Tribunal (NGT) Act, 2010. The Hon'ble NGT was therefore pleased to issue notice in both these applications vide Order dated 24.06.2020 and also constituted a Committee of Experts (hereinafter referred to as the Committee) to look into the matter with the following composition :

Hon'ble Mr. Justice B.P. Katakey, former Judge of the Gauhati High Court	Chairperson
Member Secretary, Central Pollution Control Board (CPCB)	Member
A senior expert from Council of Scientific and Industrial Research (CSIR)	Member
Dr. Sarbeswar Kalita, Professor and Head of the Department of Environment Science, Guwahati University	Member
Shri Abhay Kumar Johari, IFS (Retired), Former Member, Biodiversity Board	Member
Shri Ajit Hazarika, Ex- Chairman, ONGCL	Member
Member Secretary / Senior Scientist, Assam State Pollution Control Board Member (PCB, Assam)	Member
District Magistrate, Tinsukia District, Assam (DC, Tinsukia)	Member

3. The Member Secretary, CPCB was designated as the nodal agency for coordination while the PCB, Assam and the DC, Tinsukia were directed to provide all logistic support including personal protection equipment (PPE) in relation to the COVID 19 pandemic and security to the members of the Committee.

4. The Committee has been vested with the mandate to visit and inspect the site in question and examine the following aspects vide the Order dated 24.06.2020 :

- i. Cause of gas and oil leak ;
- ii. Extent of loss and damage caused to human life, wildlife, environment ;
- iii. Damage and health hazard caused to the public ;
- iv. Whether any contamination has been caused to water, air and soil of the area of the oil well and its vicinity ;
- v. Extent of contamination of water of the Dibru river due to the oil spill ;
- vi. For the purpose of (iv) and (v) above, it may be necessary to get the air quality monitored and, samples of soil and ground water of the area as well as the water of river Dibru downstream of the oil spill tested ;
- vii. Impact on the eco sensitive zone of the Dibru-Saikhowa National Park and Maguri-Motapung Wetland ;
- viii. Impact on agriculture, Fishery and domestic animals in the area ;
- ix. Whether there were any mitigation measure put in place by OIL to offset the incidents such as the one in question ;
- x. Persons responsible for the fire incidents and the cause of failure to prevent the incident ;
- xi. Assessment of compensation for the victims and cost of restitution of the damage caused to property and the environment ;
- xii. Preventive and remedial measures ;
- xiii. Any other incidental or allied issues.

5. While dealing with the above questions, the Committee has been given the liberty to dwell on action which has been taken thus far, by either the Government or OIL, or any other agency and the expenditure which has been incurred towards mitigation. The Hon'ble NGT has also directed that opportunity may also be provided to the Respondent OIL to submit its views and submissions.

6. Additionally, as stated in para 15 of the Order dated 24.06.2020, the Committee was given the liberty to induct any new member or seek opinion from any other expert / experts or institute / institutions including the Wildlife Institute of India, Dehradun ; if felt necessary. Accordingly, Wildlife Institute of India, Dehradun, Council of Scientific and Industrial Research- North East Institute of Science and Technology (CSIR- NEIST); Council of Scientific and Industrial Research- National Environmental Engineering Research Institute have been inducted as member institutions to lend their expertise and support to the Committee.

7. The Committee has also appointed two research associates to assist the Committee in its work namely Dr. Pranjal Bezbaruah and Ms. Abantee Dutta. Dr. Pranjal Bezbarua is an Ecologist and former Guest Faculty at the Department of Environmental Science, Gauhati University. Dr. Bezbarua holds an M.Sc. in Botany (Specialization in Ecology) and a Ph.D. in Botany from Gauhati University. Ms. Abantee Dutta is a lawyer, peace practitioner and researcher based in Guwahati, Assam. Ms. Dutta holds an LL.M. from the University of Melbourne, Australia and an M.Sc. in Conflict Analysis and Research from the Jimmy & Rosalyn Carter School of Peace & Conflict Resolution, George Mason University, USA.

8. In compliance with the Order dated 24.06.2020 passed by the Hon'ble NGT, the Preliminary Report presents the progress, assessment and findings of the Committee, till date. The discussions, observations and findings of the Preliminary Report are based primarily on secondary data that have been gathered since the communication of the aforesaid Order dated 24.06.2020. The discussions presented in the Preliminary Report pertains to the methodology adopted by the Committee in the performance of its task, the reasons for the blowout on 27.05.2020 and explosion on 09.06.2020; the environmental and regulatory violations that have emerged from the primary assessment; ongoing review of the environmental damage caused by the blowout based on secondary research/data and the interim compensation to the affected families and individuals. To permit adequate time for the preparation of the Preliminary Report and review, information collection after 21.07.2020, was not considered for this Report. The Committee will continue to consider the issues discussed in this Report as it carries out the remainder of the assigned task.

9. Be it stated herein that on 22.07.2020, another explosion occurred at the same site which injured three experts engaged by OIL to douse the fire that has been raging since 09.06.2020. The Committee has called for immediate reports from both the Office of the District Administration and OIL, which are awaited. However, the Committee has received telephonic information, both from the Office of the District Administration and OIL, that the three experts had suffered minor injuries while removing a spool from the well head. It has been further informed that operations to douse the fire will resume from today i.e. 24.07.2020. The Committee will, however, review the causes of the second explosion and report its findings in its subsequent Report.

Chapter – II

METHODOLOGY AND ANALYSIS OF REPRESENTATIONS, REPORTS AND RECOMMENDATIONS

A. Methodology

1. The current COVID 19 pandemic and consequent lockdown in Assam coupled with the ongoing floods in Assam had placed severe constraints in the working of the Committee. However, the urgency of the matter impelled the Committee to undertake its deliberations through telephone and videoconferencing on a regular basis since the date of its constitution. This has enabled the Committee to report critical progress upon the completion of 30 days in order to initiate further follow up so that a substantial portion of the mandate may be completed before the next date of hearing.

2. In fulfilling its mandate, the Committee has sought to adopt an inclusive approach and invited views, opinions and suggestions from all affected persons and stakeholders through a Public Notice dated 05.07.2020. Due to the paucity of time, the Public Notice was published in English, although it has been widely circulated in both print and broadcast media including vernacular dailies and all the local news channels. The Public Notice has garnered much attention and the Committee has received an overwhelming response, specifically from the residents of Baghjan. At their request, therefore, the Committee has extended the time for receiving representations/recommendations and has also initiated steps to publish the Public Notice in Assamese.

3. Apart from issuing the Public Notice, the Committee has interacted with several stakeholders including representatives of the local communities such as the Baghjan Gaon Milonjyoti Yuba Sangha, environmental action groups and NGOs with domain expertise such as Aaranyak etc. The Committee, on the recommendation of the Petitioner Bonani Kakkar, has also consulted and received representation and recommendations from environmental scientists including Prof. B.C. Choudhury, Dr. Asad Rahmani, Dr. Ritesh Kumar, Dr. Ranjan Kumar Das and sought it proper to call for records/opinion from various institutions with expertise and resources in those specialized areas.

4. Additionally, the Committee is engaging with OIL. Multiple queries have been raised starting from 29.06.2020 onwards. Opportunity has also been provided to OIL to furnish their views and submissions with regard to the questions that are subject matter of the present reference. No additional views/submissions have been made by OIL, till date, although they have attempted to respond to the specific queries raised by the Committee. The Committee will continue to engage with OIL in this regard. Additionally, the Committee has been engaging with the Government of Assam, specifically the Department of Environment and Forest, the Central Pollution Control Board, Pollution Control Board, Assam, Assam State Biodiversity Board, CSIR- NEIST, whose responses have been valuable in the writing of this Preliminary Report. The Committee will continue to engage with these stakeholders. The information gathered till date from the aforesaid stakeholders including OIL form the basis of the discussions contained in Chapters III onwards of this Report.

5. The Committee has been unable to visit Well Baghjan -5 and its neighboring areas inspite of having scheduled two site visits till date. This has been due to the combined factors of the ongoing lockdown in Assam due to the evolving COVID 19 situation, the ongoing floods and health challenges of few of the Committee members, including the Deputy Commissioner, Tinsukia who has unfortunately tested positive of COVID 19 during this time. However, the Committee has gathered valuable material and information through carrying out extensive desk research combined with a thorough review of secondary data made available through reports and documents received from various stakeholders. Such reports including those of the three Committees constituted by the Government of Assam including the Expert Committee headed by Shri M.K. Yadava, reports of the *Gaonburahs* (Village heads) of the concerned villages, called for through the Office of the District Administration and Wildlife Institute of India (hereinafter referred to as WII) which have provided some perspective on the ground situation. This has been supplemented by the views and opinion received from representatives of the local community, few of which are summarized in the following section. The Committee, upon the submission of this Preliminary Report, is scheduled to undertake a site visit soon, the date of which will be fixed in consultation with the DC, Tinsukia.

B. Analysis of Representations, Reports and Recommendations

This section provides a concise summary of selected submission made by representatives of the local community including affected families and individuals. The section also presents some of the observations and recommendations made by few environmental scientists. The information gathered from these representations and reports substantially informs the subsequent sections on 'Assessment of Damages' and 'Interim Compensation' contained in Chapter V of this Report.

Niranta Gohain, an Environmentalist, Entrepreneur and a Resident of Dibru-Saikhowa

1. In his representation dated 12.07.2020, Shri Gohain mentioned that the concerned oil well has been established illegally without mandatory prior permissions which are needed such as Environmental Clearance, the Consent to Establish and Consent to Operate etc. No public hearings/consultations were held too. He further stated that since OIL began operation, it has adversely impacted the rich cultural life of the indigenous residents and the rich biodiversity of the Dibru-Saikhowa National Park and the Maguri-Motapung Beel. He has stated that OIL has not evinced any concern for the health of local residents. The drinking water available from tubewells has become undrinkable because of an odour after the blowout apart from new forms of disease creeping up among the population. He demands that till the fire is extinguished, proper camps must be arranged. Further, the farmers whose lands have been permanently damaged must be given adequate compensation. In his estimate, land in the radius of 5-6 kms of the Well Baghjan-5 will be non-cultivable for the next 20 or more years. The aquatic animals in the Maguri-Motapung wetland have also been completely damaged.

2. Shri Gohain emphasized that the eco-tourism industry in Natun Rongagorha village has been destroyed completely and the people involved in this industry must be given adequate compensation. By involving environmental workers and local population, a project worth 100 crores must be undertaken to reclaim the ecology. Further, there has been an irreversible impact on the rich biodiversity in the area. He expressed concern over the Central Asian Flyway which is over the area of the blowout as the migratory routes of birds may get impacted. Additionally, he mentioned that individuals who could not be accommodated in the relief camps organised by OIL and

the Government of Assam are still staying in the villages and are suffering from acute food shortage. No measures regarding COVID 19 are being taken in the relief camps which have been set up by the Government of Assam. For example, in the relief camp at Guijan Higher Secondary School and Guijan Middle English School, only 5 toilets are available for 2000 residents. Government guidelines mandate that at least 66 toilets should have been available for so many residents. No measures for registration of residents in these camps are available. Adequate compensation must be provided for such a situation.

3. The representation also enclosed short transcripts of 83 interviews with residents of 11 villages in the vicinity of the site of incident. All of these interviewees have reported health related impacts of the blowout and ecology related impacts. Some second-order impacts such as damage to homes due to tremors from the blowout, impact on children's education has also been widely reported. Of the 83 interviewees enclosed in the Report, 44 interviewees reported both health and ecology related impacts while 12 interviewees reported damage to ecology specifically. One of the interviewees, as mentioned in his Report, also claimed that the well blowout had damaged the area culturally and its heritage had been completely dismantled. All the interviewees unanimously mention some form of adverse health impact such as breathing difficulty, headache from the incessant sound from the well, damage to cultivation, polluted drinking water etc. Many local residents also report heavy damage to homes from the earth tremors generated by the well blowout. In areas closer to the Well Baghjan-5, such as Baghjan village, the effects on flora, fauna and human life have been disturbing. All 4 testimonies from Baghjan village, mentioned in the Report, concur that livestock have died after eating grass/fodder contaminated with condensate. Common local species such as hornbills, tortoise, snakes have been dying/disappearing in large numbers. In fact, dead carcasses of some animals have been floating in nearby water bodies.

4. Further, the representation dated 27.07.2020 was made by Shri Gohain along with 10 other residents of the affected area which raised concern over the condensate from the well blowout that has affected the habitat of many migratory species of birds and damaged grasslands. The representation also provides detailed recommendations for reviving the eco- tourism sector in the area.

5. An additional representation dated 21.07.2020 provides a comprehensive summary of the ongoing and future operations of OIL in Baghjan and its neighboring areas. The representation emphasizes the fact that the condensate from Well Baghjan-5, are polluting the agricultural lands and households within five to six kilometres radius of the said rig. People experiencing the impact of the condensates over their area remain unaware of the effect of the condensates on them. The Government of Assam or OIL authorities are yet to inform the people about possible impacts of condensate on their life and property and the precautions that are essential while dealing with condensate spills. Although it was apparent that houses were at the risk of catching fire due to spillage of the condensate around Well Baghjan-5, the authorities have not informed the neighbouring residents or made adequate arrangements for evacuation of their belongings.

6. The representation further mentions that many of these people belonging to Baghjan and Natun Rongagorha village have refused to stay at the relief camps due to the fear of testing COVID 19 positive and poor facilities in these camps. They prefer to remain at home despite facing hardships due to intense tremors and loud sound emanating from Well Baghjan-5. Further, affected families who are not living in these camps due to the above-mentioned conditions are not getting their daily rations or compensation from the authorities. He has requested that an investigation be launched immediately to inquire into the management of the relief camps. Since the affected people have no access to livelihood opportunities, the authorities should ensure that all the affected villages in the area are provided with daily allowance and ration till the blowout and the fire from Well Baghjan-5 is controlled. The representation reported on the unfortunate suicide of Shri Sukleshwar Neog, a resident of Baghjan triggered due to the ongoing hardships faced by the affected villagers.

Monoj Hazarika, S/o Shri Rajani Hazarika, resident of Village: Baghjan (aerial distance of 1km from the site), P.S: Baghjan, District: Tinsukia, Assam

1. One of the representations received from a resident of Baghjan village has outlined several issues being faced on the ground in the aftermath of the blowout and explosion. According to Shri Hazarika, cultivable land and production has been heavily

damaged due to the condensate since 27.05.2020. Even tea gardens which are in the harvesting phase have suffered huge damage because of the *oil rain*. Paddy for the whole year has been destroyed due to the condensate which has settled on the fields. The damage to agriculture is compounded by the fact that the feeding areas/grass for domestic animals have been damaged due to the condensate and they have been starving as a result.

2. The economic damage to the area is also equally severe as large scale damage to roads has been caused from the heavy vehicles which have been moving incessantly since the blowout. In addition, main roads remain sealed since the incident. Because of the constant tremors, heavy damage to infrastructure and homes has been seen.

3. School going children and students are bearing the brunt of the incident as they have not been able to study from the incessant noise and tremors. Constant tremors have increased physical and mental stress apart from damaging the *Tamul*-Bamboo trees. The incessant and loud noise trigger anxiety and depression among the local residents. Shri Hazarika suggests that an allowance of at least Rs.500/- per day, till normalcy is restored, is essential for the local population.

Dr. Ranjan Kumar Das, Associate Professor and Head of the Department, Department of Geography, Tinsukia College, Tinsukia, Assam

1. Dr. Das has provided his report on the basis of his long-term research on the grassland birds in Dibru-Saikhowa National Park. Apart from providing a detailed description of the importance of the Maguri-Motapung wetland ecosystem and the various vulnerable species according to the IUCN Red Data Book, Dr. Das has also provided an assessment of the damages through six field visits to the Maguri-Motapung wetland.

2. In his perspective, the first phase of the damage happened during the period from 27.05.2020 to 08.06.2020 when the toxic gases with condensate were being blown out. In this first phase, the condensate and the spill affected all forms of life within a 2 kms radius while the effects of the gases could be felt even at a distance of more than

9 kms. In his assessment, within the 2 kms radius, all the phytoplankton and zooplankton were directly affected while there were coatings of oil film on plant life, water bodies, agricultural fields, gardens and manmade structures. The grasslands have been severely affected and most of the grassland bird species enlisted in the IUCN Red Data Book who were breeding have abandoned their nests without hatching. The table included by Dr. Das is reproduced herein below :

Table 1: List of the breeding grassland birds of Maguri-Motapung grassland and their IUCN status

Species	Scientific Name	Status in IUCN Red Data Book
Swamp Francolin	<i>Francolinus gularis</i>	Vulnerable
Marsh Babbler	<i>Pellorneum palustre</i>	Vulnerable
Jerdon's Babbler	<i>Chrysomma alirostre</i>	Vulnerable
Black-breasted Parrotbill	<i>Paradoxornis flavirostris</i>	Vulnerable
Swamp Prinia	<i>Prinis cinerascens</i>	Near Threatened

3. Dr. Das states that there has been immense damage to aquatic habitat with the death of many fishes, herpetofauna and insects reported with their carcasses floating on the water. A carcass of the endangered Gangetic Dolphin (*Platansita gangetica*) has been collected from the Maguri-Motapung wetland. It also indicates that the oil condensates have been dispersed to longer distances.

4. In the second phase, that is, from 09.06.2020 onwards, the fire which broke out led to immense damage to the local population and their homes, apart from small tea gardens which were completely burnt down. The grasslands on the south-western side and the western side have been impacted by the fire and during his field survey, it was observed that bird density and diversity within a 1km radius had reduced substantially. It was noted that not a single threatened bird species in the IUCN Red Data Book were seen as most of their habitats have been badly affected by the fire. As on 14.07.2020, even after three waves of floods, oil sleek and condensate could be observed in the grassland habitats.

Goa foundation

5. In conclusion, Dr. Das suggests that there should be a total ban on further oil drilling in and around the Maguri-Motapung wetland and Dibru-Saikhowa National Park along with the expansion of the Eco-Sensitive Zone of the Dibru-Saikhowa National Park. In this regard, the Hon'ble Supreme Court's Order of 10 kms of Eco-Sensitive Zone should be followed. He suggests that, there has to be proper restoration planning for both the Maguri-Motapung wetlands and its corresponding grasslands with priority being given to community-based conservation and development of eco-tourism as an alternative means of livelihood.

Green Vision Northeast, a local environmental action group

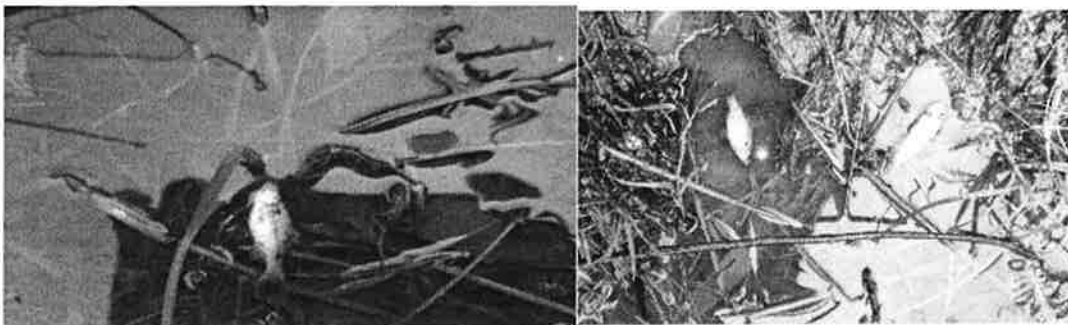
1. Vide their representation dated 12.07.2020, the Green Vision Northeast state that all the authorities such as the Forest Department, Pollution Control Board, Assam etc. are equally responsible for allowing oil drilling, by violating environmental laws in a "Eco-Sensitive Zone" such as the Dibru-Saikhowa area. EIA protocols such as the Environment Management Programme (EMP) have never been implemented in the area by OIL inspite of having obtained permission under the EIA regime. They further state that the present assessment of compensation has not considered all the people who have suffered damage. List of various villages which have not been considered have been enclosed along with the representation.

Imon Abedin, B.Sc. (Zoology Hons.) Student, Tinsukia College

1. The representation provides a description of the site of incident and provides documentation of the immediate aftermath and the impact on the ecology including human life. It recommends that a proper impact assessment be carried out in the surrounding areas. To this end, OIL, should work together with the locals to recover the damage once the fire is contained and also help to establish eco-tourism and indigenous fishing practices in the area. Some of the photographs included in the representation are reproduced herein below :

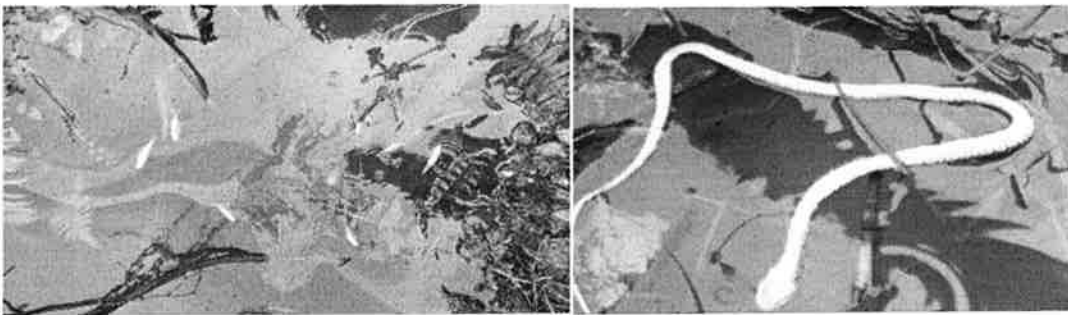


Fig.- 7 – Carcass of Fresh water Gangetic River Dolphin(Schedule 1) recovered from the affected area(P.C.- Hatibaruah B.)



(a)

(b)



(c)

(d)

Fig.- 8 – (a),(b),(c)- Dead fishes and (d)- dead snake from the affected region

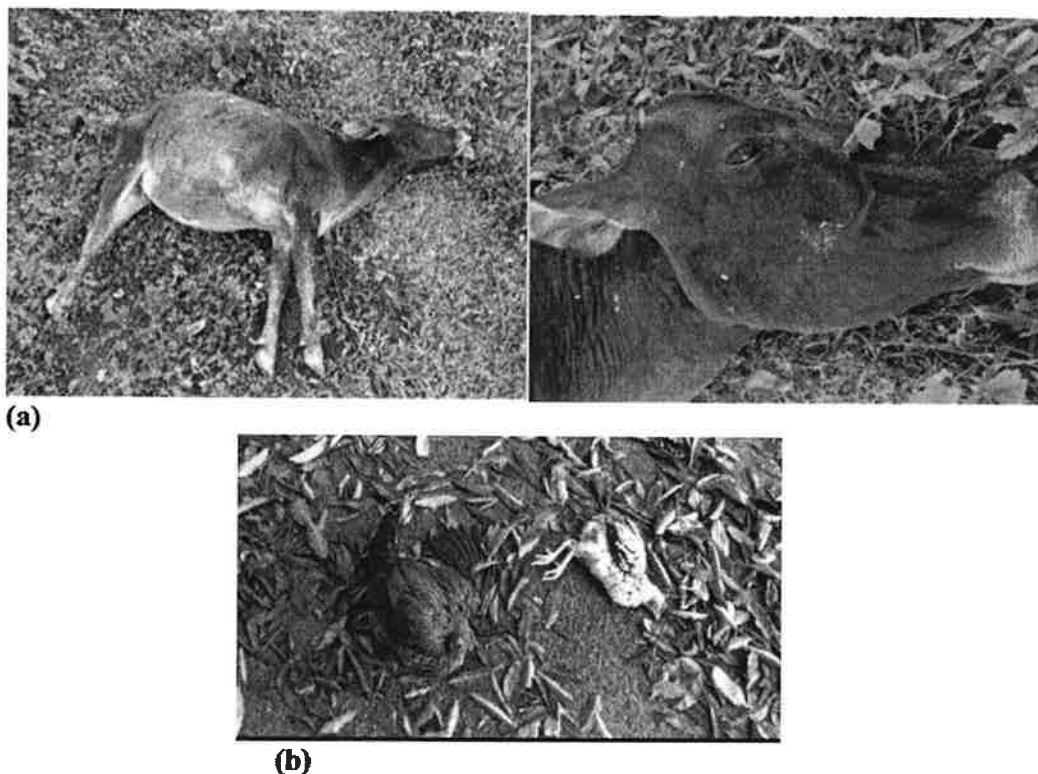


Fig.- 11 – Cattles affected due to the spillage having eye and skin problems (a),(b)

Aaranyak, organisation working in biodiversity conservation in Assam

1. Among the recommendations forwarded in Aaranyak's detailed report is a suggestion for a comprehensive post-disaster impact assessment involving creditable agencies and international, national and local experts. Such an assessment should also encompass the views of the local communities. In line with the other expert opinion received by the Committee; Aaranyak has suggested an integrated ecological restoration plan including bioremediation of hydrocarbons polluting the soil. This restoration, they suggest must be implemented over a long period of time (at least five years) to restore the previous status of the wetland. On the role of the Government and OIL, it has been suggested that livelihoods of the affected people must be rehabilitated instead of short-term cash benefits. Health insurance cover for people residing within 10 kms radius of oil exploration sites should also be the responsibility of the Government and user agencies.

The Wildlife Institute of India, Autonomous Institution of the Ministry of Environment, Forest and Climate Change, Government of India

1. The Wildlife Institute of India (hereinafter referred to as WII), is an apex research institution under the Ministry of Environment, Forests and Climate Change, Government of India and has been inducted as a Member of the Committee. With expertise in the ecosystem of Dibru-Saikhowa and having adequate research resources at its disposal, the Committee deemed it fit to request the WII to provide an expert assessment of the site in relation to the Terms of Reference. A survey team from the WII had been carrying out a reconnaissance survey in the affected area from 29.05.2020 to 04.06.2020 based on which a Preliminary Report has been placed before the Committee. An update to this Report was sent on 17.06.2020 bringing on record certain additional observations and also intimating about the status of the contaminant survey and the biodiversity assessment. Several observations from the Report are of interest. It is conclusive to the WII that there has been mass mortality of species and the contaminants from the oil, having universal impact on the high biodiversity area. According to the assessment of the WII, the toxins which are being released generally have long persistence in soils and sediments, which apart from affecting current life conditions of the local population will also continue to be a serious health risk in future. The WII is of the opinion that there is no mitigation plan in place. It therefore recommends that a comprehensive impact assessment of the accident be done, given the high seismic activity in the area. It has also recommended that the approved wells and exploration projects in the area be kept in abeyance till potential impact assessment and adequate disaster management capabilities are in place along with sufficient technology and human resources.

2. The impact assessment report dated 15.07.2020 by the WII provides a detailed analysis of the extent of damage in the aftermath of the blowout and spill. The results indicate that large scale damage has been caused to the biodiversity in the area. The tests and evaluations carried out by the WII conclude that high levels of carcinogenic Polycyclic Aromatic Hydrocarbons (PAH) pollutants have been released into the ecosystem, and will remain in the system for a long time. The concentration of carcinogenic PAH was found to be significantly higher than other studies in India and

other parts of the world. Concentration of PAH found in fishes collected from Maguri-Motapung wetland was found to be 10-100 fold higher than earlier reported concentration in India and other parts of the world. The impact of this will be long term as these pollutants will leach into the ground and contaminate ground water.

3. It has also recorded that the sound pollution in the area is excessive and is detrimental to both human and animal life. The noise level in 12 kms radius of 70db or above is higher than standard limits set by WHO and CPCB and is not suitable for both human and animal life. In prolonged period, it may result in hearing loss and many other ailments apart from affecting most of the birds and mammal species.

4. High mortality has been reported among fishes, insects, herpetofauna and insects including the decline of Gangetic River Dolphin Population in the area. A mortality among the Gangetic Dolphin Population due to oil poisoning in the area has also been reported. It has been found that encounter rate of Gangetic River Dolphin in the area has decreased by 89% post of the blowout. While dolphin presence was recorded in Lohit and Dibru areas, no recording of dolphin sound in Maguri-Motapung areas, which was the most impacted site. It has been found that bird species richness increases with the increase in distance from oil spill site. While the overall richness and abundance of fishes decline with decrease in dissolved oxygen at different sites, which in turn was a result of the oil spill. There was a similar impact on insect populations which were found in much less number closer to the impact site.

5. The results indicate that the levels of Dissolved Oxygen in the Lohit, Dibru and Maguri-Motapung was lower than the minimum recorded value of Brahmaputra and barely above CPCB class A limits. The levels of Dissolved Oxygen had decreased from the day of blowout till the last date on 22.06.2020. In the opinion of the WII, the Maguri-Motapung wetland is the worst affected with large scale death of aquatic fauna.

6. In conclusion, WII has recommended detailed remedial measures, including a long-term study to understand the long term impact of the spill and blowout impact on the environment of Maguri-Motapung wetland and Dibru-Saikhowa National Park as well as on the health and socio-economic conditions of local communities. They also

suggest re-evaluating the continuance of oil drilling and extraction in such a fragile ecosystem with critically endangered species such as the White winger Wood Duck. A copy of the Report titled “*Impact of oil well blowout at Baghjan oil field, Assam and resulting oil spill, on surrounding landscape*” by the Wildlife Institute of India dated 15.06.2020 is appended hereto as **Appendix-A**.

Wetlands International South Asia, represented by Dr. Ritesh Kumar, Director

1. Based on experience of working in similar ecosystems, Wetlands International has provided several observations and recommendations in its detailed letter to the Committee. Noting that floodplain wetlands like the Maguri-Motapung wetland are crucial to functioning of connected river ecosystems, it has been pointed out that the damage due to condensate in the wetland will also directly impact the Dibru River ecosystem. It has also been observed in the letter, that in the present case, it seems that the oil spill has mixed with the wetland soil thereby leading to the conclusion that the impacts will be persistent and long term. It has provided detailed suggestions for restoration of the wetland as per the principles and guidelines for wetland restoration adopted by Resolution VIII. 16 (2) of the Ramsar Convention. Recommendations have also been provided on a comprehensive ecological monitoring of the Maguri-Motapung wetland so as to assess the impact of the oil spill and fire. On the policy front, the organisation is of the view that Notification of the Maguri- Motapung wetland under the Wetlands (Conservation and Management) Rules, 2017 will ensure that clear management rules are put in place. In conclusion, it has recommended that all oil and gas related activity in and around the area of influence of the wetland and the Dibru Saikhowa National Park may be prohibited due to the risk they pose to sensitive ecosystems.

Prof. B.C Choudhury, Executive Trustee, Wildlife Institute of India and Retired Faculty and Scientist, Wildlife Institute of India

1. Prof. Choudhury has forwarded his opinion on the basis of his training and experience as a wildlife and wetland biologist, with familiarity to the ecosystem of the Dibru-Saikhowa- Maguri-Motapung complex. After a detailed assessment of the reports generated by the WII team, Prof. Choudhury has provided several key recommendations

to the Committee. Among others, he suggests the creation of an expert study group led by the Indian Institute of Technology, Guwahati to determine the impact zone and suggest preventive measures. He has also suggested a framework for a multi-disciplinary committee headed by an Officer of the Forest Department to develop a restoration plan, the cost of which will have to be borne by OIL on the principle of Polluter's Pay. On the economic front, he has suggested the creation of a committee by the office of the District Administration of Tinsukia and Dibrugarh to ascertain the economic loss to local communities and recommend compensation packages and other restoration measures to be funded by OIL. Prof. Choudhury is of the opinion that identification and creation of a sensitive Ecological Safety Zone in and around the Dibru-Saikhowa and Maguri-Motapung wetland and encompassing adjoining protected areas complex is the need of the hour, so that the expansion of volatile and sensitive hydrocarbon and other developmental projects are not permitted.

Dr. Asad R. Rahmani, Former Director, Bombay Natural History Society

1. Dr. Rahmani has forwarded his opinion on the basis of his expertise in the field of biodiversity conservation and his previous work in the area of Dibru-Saikhowa and the Maguri-Motapung wetland. He has provided several suggestions for a comprehensive framework to protect the Dibru-Saikhowa-Maguri-Motapung complex in a holistic manner by ensuring both restitution and restoration of the damaged ecosystems in the area. Apart from expansion of eco-sensitive zone of Dibru-Saikhowa to include areas like Maguri-Motapung, Poba Reserve Forest, Kobo and Amarpur *chaporis*. He advocates for a complete ban on drilling in and around the complex. Among others, he also suggests that the Maguri-Motapung wetland be declared in the protected area network along with the formulation of an integrated management plan for the wetland considering river landscape interaction. This could also be facilitated by notifying the Maguri-Motapung wetland under the Wetlands (Conservation and Management) Rules, 2017. Noting that the risk assessment in the Environmental Impact Assessment had been downplayed, Dr. Rahmani recommends that a fresh risk and hazard assessment be carried out.

CHAPTER – III

GEO ENVIRONMENT OF BAGHJAN AND ITS NEIGHBOURING AREAS

A. Location

1. Baghjan is located in the Doomdooma Revenue Circle of the district of Tinsukia in the State of Assam, India. It is situated 20 kms away from the Sub-Divisional Headquarter Doomdooma and 50 kms away from the District Headquarter Tinsukia. The Tinsukia district, located in the north corner of the Upper Brahmaputra is characterized by flood plains, beels / wetlands and swamps and occasional highlands. The area may be divided into three distinct physiographic zones stretching parallel to the Brahmaputra River including the active flood plain and 'charland' / sandbars, the middle plain and the southern foothills.

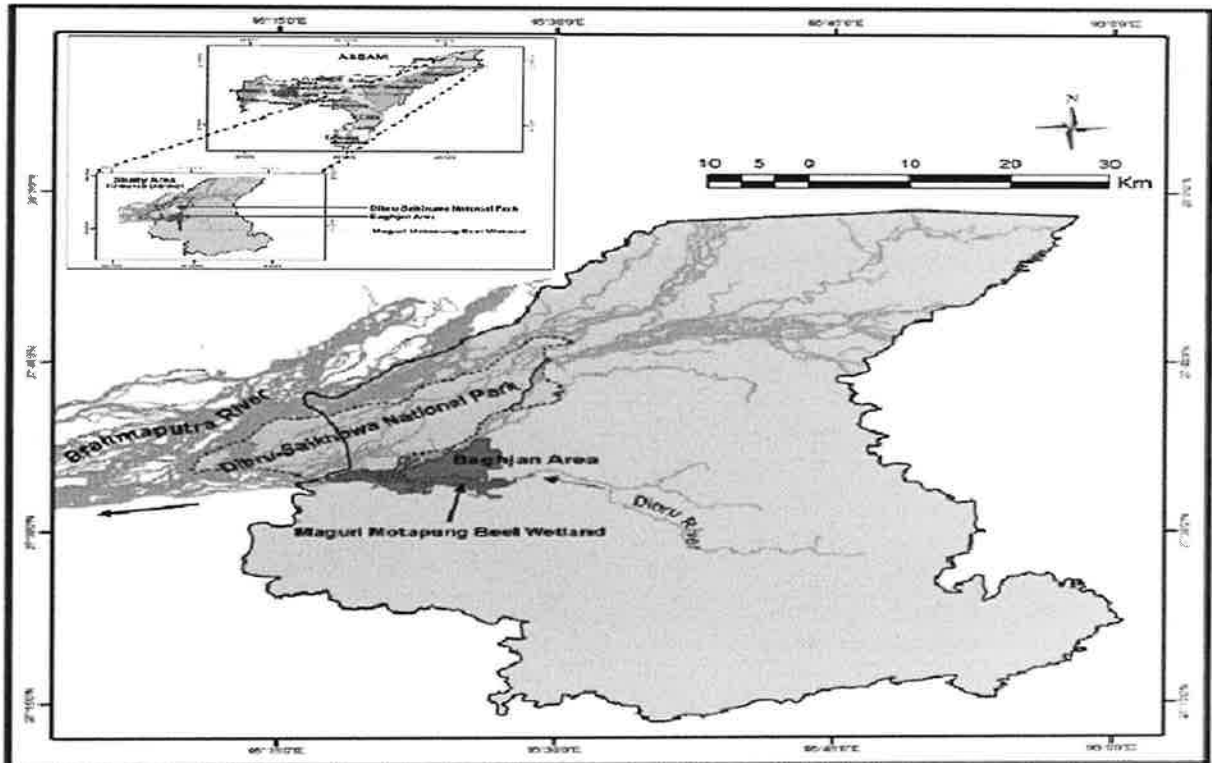
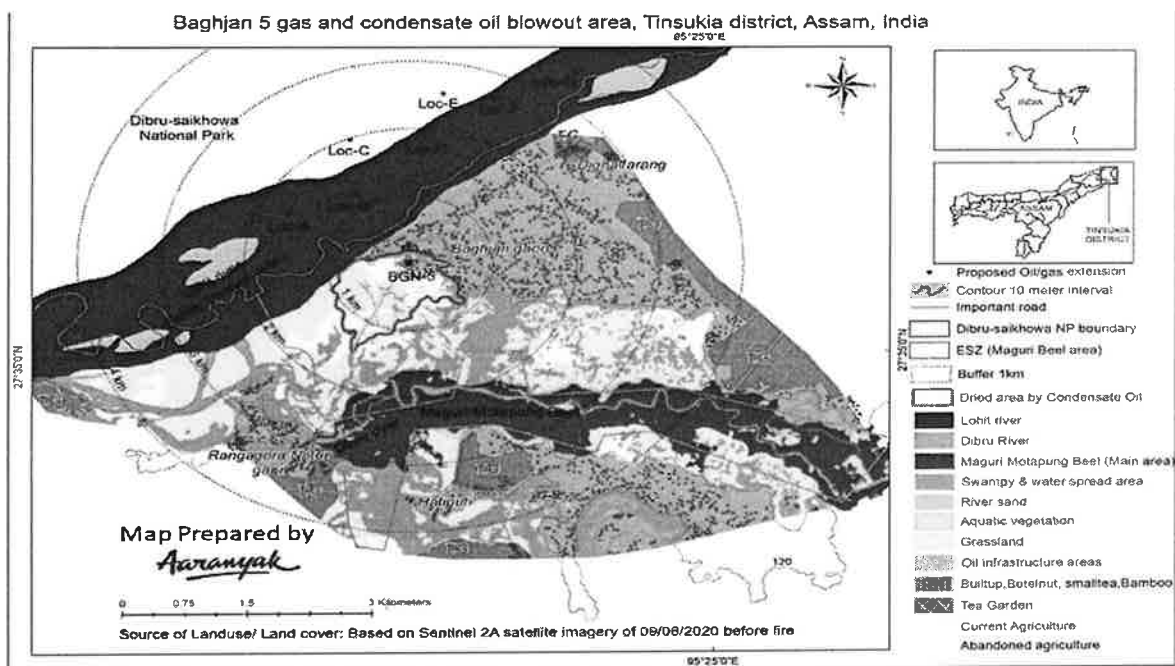


Fig.1 : Map of Baghjan Area and its surroundings. (Source: Map prepared by Prasanna Boruah, Sr. Scientific Officer, ARSAC)

2. Baghjan and surrounding areas are flanked by the Dibru-Saikhowa National Park (hereinafter referred to as the DSNP) and Biosphere Reserve in the north to north west and Maguri-Motapung wetland complex in the south under the district of Tinsukia. Eastern side of the area is covered by Baghjan Tea Garden and Diamuli Tea Garden. This landscape lies in close proximity with the Eastern Himalayas and is characterized

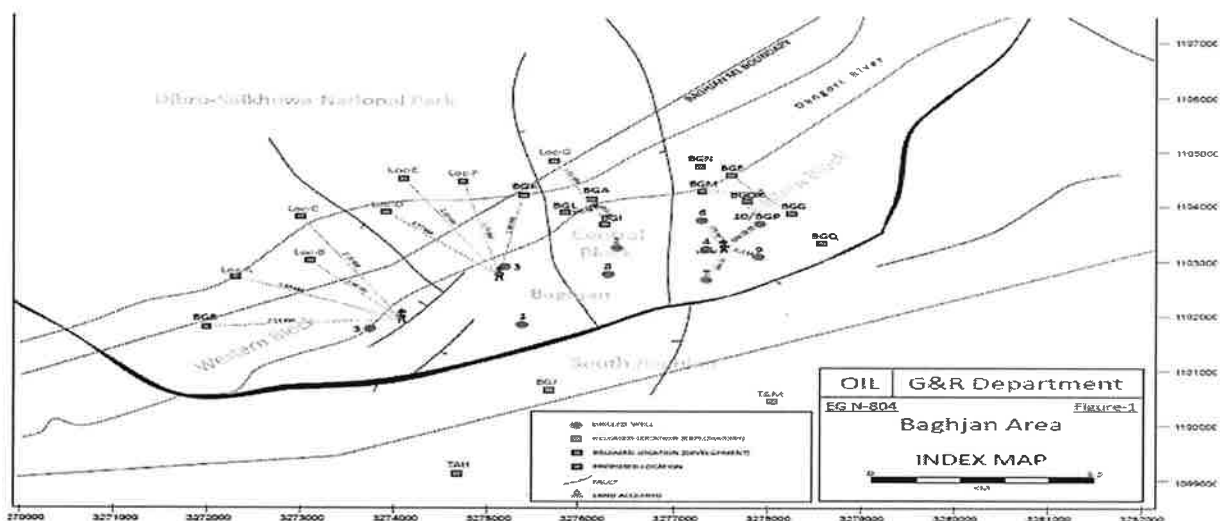
as an Important Bird Area (IBA) and Endemic Bird Area. It lies below the periphery of the DSNP comprising an area of 340 km² which is the core of the larger Dibru-Saikhowa Biosphere Reserve (hereinafter referred to as the DSBR) and spans over 765 km² (Mathur, 2018).

3. There are several oil and gas based wells of OIL as well as related infrastructure like pipeline in Baghjan and surrounding areas. It is worth mentioning here that Well Baghjan-5, which is site of the blowout on 27.05.2020 and explosion on 09.06.2020 constitutes both parts of the Assam Arakan basin and the Indo Burma Biodiversity Hotspot. Additionally, it is at a distance of 1.46 kms aerial distance from the DSNP Eco-Sensitive Zone boundary GPS Serial No.15 (Aaranyak, 2020). On the other hand, Maguri-Motapung wetland is located less than 1.75 kms south to the above-mentioned Gas and Condensate Well. The connection of the water from Dibru River to DSNP increases the possibility of pollutants spreading to the National Park in the downstream specially during flood period. Bherjan-Padumoni-Borajan Wild Life Sanctuary is south to the Baghjan area and the Maguri-Motapung wetland. The Bherjan segment has an aerial distance of about 6.2 kms from the Baghjan (ERM, 2018) while it is aurally 12 kms from Padumoni segment.



Map-1: Showing the location of Baghjan 5 Oil and Condensate Gas Well

Source: Report submitted by Aaranyak to the Committee



Source: Pre-feasibility report for Drilling of ERD Wells in Baghjan Area in Tinsukia district in the State of Assam, OIL India Ltd.

4. Well Baghjan-5, falls primarily within the depositional plains of the River Brahmaputra and its tributaries. The key physical features include flood prone areas which lie in the riverbed of the Dangori River and in the periphery of the southern part of the DSNP. The Dibru River, a main river channel of the Brahmaputra which flows in the northern side of the area separates the DSNP and the Well Baghjan-5.

I. Land use

a. Agriculture land and settlements

1. The area primarily comprises of rural area with settlements, homestead plantations and agricultural lands of Dighaltarang and Baghjan villages dotted by many small tea gardens on the eastern side of the area including the Baghjan, Diamuli, Longswai and Dighaltarang Tea Gardens. Human habitation and agricultural land are located at the fringes of Well Baghjan-5, DSBR and Maguri-Motapung wetland.

2. The landscape has tropical monsoon climate with a hot and wet summer and cool and usually dry winter. The annual rainfall ranges from 2300mm to 3800mm which occurs mainly in the months of June, July, August, and September. The average coldest and warmest temperature of the area ranges from 7 to 34°C (Nongmaithem et al., 2016). The land use pattern of Baghjan area shows that majority of the land (60%) is used for agricultural purposes with paddy and tea gardens (Aaranyak, 2020). Open mixed jungle

and scrub cover an area of 2% and 3% of the total area. The Dibru river is the main river channel flowing southwest towards Tinsukia. The Baghjan and its neighboring areas are also dominated by different villages namely Baghjan village, Baghjan NC, Dighal Tarang, Natun Rangagora, Gotong, Motapung, Dhelakhat, Hatiputi (Aaranyak, 2020) under Tinsukia district. According to the People's Biodiversity Register of Hapajan Anchalic Panchayat Biodiversity Management Committee (hereinafter referred to as BMC) (2016), the agricultural biodiversity, domesticated biodiversity and wild biodiversity (aquatic and terrestrial) are very rich in villages and surrounding areas. Different types of indigenous rice varieties, fruits, vegetables, wild plants, wild medicinal and edible plant species and fish species are documented by the BMCs and managed by local villagers. Different tea gardens mentioned above and homestead tea gardens (by individual) also refuse different types domesticated biodiversity elements in the area. Majority of the families are dependent on agricultural activities and allied livelihood. Agricultural activities rely on the ecosystem services (Bhatta et al., 2016) of the flood plain (for fertile soil, supply of soil moisture etc.) of the area. Homestead tea gardens are an important source of livelihood for some people. Livestock rearing is also a common source of income in the area.

3. The population of the above-mentioned villages and surrounding areas is dominated by ethnic communities such as Moran, Motak, Koch, with an average household size of 4.9 (Bhatta et al., 2016) and tea tribes of greater Assamese society etc. With increasing awareness about benefit of ecosystem services like ecotourism, some local groups run eco-resorts, taking the profession of nature guides, providing boat services in and around DSNP and Maguri-Motapung wetland. A scan of the data provided by the office of the District Administration indicate that most of the villagers in Baghjan village possess about 2 kathas to 10 bighas of land though most of them have only 1 to 3 bighas of land. However, this information will be different for other villages and would require further verification.

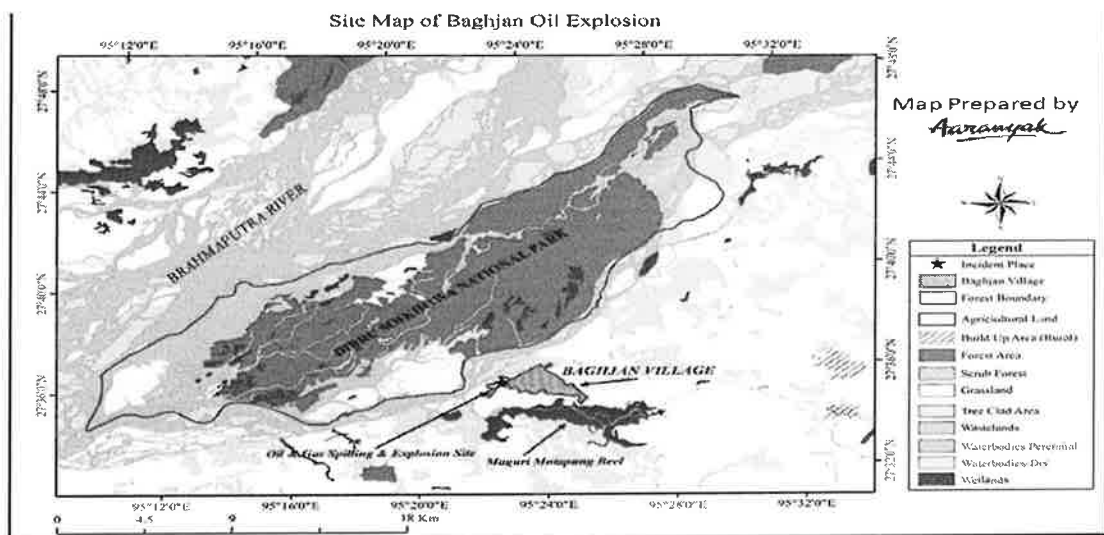
b. Forests

Baghjan and its surrounding areas are mainly comprised of tropical moist mixed semi-evergreen forest, moist mixed deciduous forest, wet tall grassland, short grassland, swampy vegetation, scrub forest, (Boruah et al., 2003). The tropical semi-evergreen and deciduous forest are mainly confined to DSBR and Bherjan-Borajan-Padumoni WLS.

c. Water bodies

1. Water bodies are mainly confined to the Maguri-Motapung wetland and surrounding areas including DSNP. The Maguri-Motapung wetland lies south of Well Baghjan-5. The Maguri-Motapung wetland is in essence, a complex of floodplain wetland and is critical in the functioning of the Dibru River ecosystem. The Maguri-Motapung wetland was formed after the great Assam Earthquake of 1950 (Das, 2020). This flood plain wetland ecosystem is hydrologically connected to the three rivers Dibru-Dangori and Lohit through a complex network of branches and distributaries. The Dibru River flows through the middle of the Maguri-Motapung wetland by a system of channels which is unique due to the presence of lotic (flowing water) and lentic (standing water) ecosystems (Das, 2020). More than 80% of villagers around the Maguri-Motapung wetland have fishing and fishery related activities as the major livelihood. A large number of local people earn their livelihood from eco-tourism related activities such as running eco-resorts, acting as nature-guides, and providing boat services etc.

2. The Maguri-Motapung wetland has been declared an IBA due to its ornithological importance. It provides a habitat for several bird species on the Red List of the International Union of Conservation of Nature (hereinafter referred to as IUCN) apart from containing rich biodiversity.



Map-2: Location of blast site along with location of Dibru-Saikhowa NP and nearby areas

Source: Report submitted by Aaranyak to the Committee

d. Flora

1. The flora of the area is very rich in terms of presence of DSNP Park and Biosphere Reserve and Maguri-Motapung wetland complex. A study by Botanical Survey of India indicated presence of 680 plant species belonging to 464 genera and 143 families of flowering plants (Bora et al., 2003) from DSBR. Out of 680 flowering plants, 290 species are herbs including aquatics, 152 shrubs and under shrubs species, 124 trees species, 81 species are climbers and lianas, 19 epiphytes are, 4 parasites species, 6 palms and 4 bamboos species. Amongst the orchids, *Liparis mannii* is catalogued as endemic to Assam (Hegde, 2000).
2. During a different survey an appreciable number of 43 species of orchids covering 25 genera have been collected and identified (Gogoi et al. 2010) from DSBR. Out of these 35 are epiphytic and 8 are terrestrial species. In the grassland near Baghjan, at least 4 ground orchid species were located (Khanajyoti Gogoi, pers. Comm.).
3. The surrounding landscape of the Baghjan area is comprised of diverse grassland communities dominated by *Arundo donox*, *Phragmites karka*, *Saccharum ravaenae*, *Saccharum spontaneum*, *Imperata cylindrica* (in highland).
4. The semi evergreen forest is comprised (Kalita et al., 2003) of *Anthocephalus codomba*, *Artocarpus chama*, *Dillenia indica*, *Dipterocarpus macrocarpus*, *Lagerstroemia speciosa*, *Terminalia myriocarpa*, *T. bellerica*, *T. chebula*, and different species of *Syzgium species*. The deciduous forest types are generally dominated by *Dalbergia sissoo*, *Bischofia javanica*, *Salix tetrasperma*, *Dysoxylum binnectiferum*, *Bombax ceiba* etc.
5. Aquatic vegetation of Maghuri-Motapung Beel was comprised of *Eichhornia crassipes*, *Pistia stratiotes*, *Lemna major*, *Azolla pinnata*, *Ludwigia*, *Rumex sp.*, *Hygroryza aristata*, *Trapa natans* *Nymphaea sp.* (Noroh, 2013).
6. A fairly rich phytoplankton (61 species) was recorded (Noroh, 2013) from the Maguri wetland ecosystem and belonged to Chlorophyta (35 species), Bacillariophyta (13 species), Euglenophyta (7 species), Cyanophyta (5 species) and 1 species from Dinophyta. Some Phytoplankton species from Bacillariophyta are indicator of water quality and identified as oil pollution tolerant species (Bordoloi and Baruah, 2015).

e. Fauna

1. A review of existing information and site survey in Baghjan as gathered by the Committee from the Reports of various Stake holders indicates and surrounding landscape which includes DSNP and Maguri-Motapung wetlands, indicates that the area harbours around 40 species of mammals, 104 species of fish, 11 species of chelonians, 18 species of lizards and 23 species of snakes, 105 species of butterflies (WII report, 2020). The landscape provides habitat to tiger, leopard, Asian elephant, wild Water Buffalo, Hoolock Gibbon, Capped Langur, Slow Loris, Ganges River Dolphin. Amongst herpetofaunal species, it is home to the critically endangered Black Soft-shell Turtle as well as several endangered species including narrow headed Soft-shell Turtle, Assam Roofed Turtle, Schedule I species including Indian Flap-shell Turtle, Water Monitor Lizard, Indian Roofed Turtle, Burmese Rock Python and several species of range-restricted frogs (WII, 2020).
2. The Maguri wetland and surrounding water bodies that linked with DSBR recorded (Noroh, 2013) 210 species of zooplankton belonging to 78 genera and 32 families. These are from the group of Rotifera (141 species), Cladocera (49 species), Rhizopoda (11 species), Copepoda (7 species) and Ostracoda (2 species). Rotifera forms an important group of freshwater metazoans and of fish-food-organisms, and an integral link of freshwater food-webs (Sharmah et. al, 2017).
3. A total of 48 number of fish species including 5 exotic fish species belonging to 35 genera under 18 families from 7 orders is recorded from Maguri-Motapung wetland (Kalita et al., 2016). According to IUCN status of the recorded fish species, 1 species is endangered, 1 species is data deficient, 2 species are lower risk-near threatened, 39 species are lower risk- least concern and other 5 species are not evaluated. (Kalita et al., 2016).
4. The residential population of River Dolphin from Dibru visits the adjacent Maguri wetland during flood (Bania, 2011) season. As River Dolphin preys on fish, the presence of this mega fauna indicates rich diversity of the fish species in the wetland areas.
5. Around 298 species of birds have been recorded from Maguri-Motapung wetland till date (Das, 2020). The surrounding area is also habitat for both resident and

winter waterfowl and grassland birds that are globally threatened and locally near endemic. Some breeding grassland birds like Swamp Francolin, Marsh Babbler, Jerdon's Babbler, Black-breasted Parrotbill, Swamp Prinia have high conservation value (Das, 2020; Aaranyak, 2020) and depended on tall grassland of the Maguri-Motapung wetland. Dr. Ranjan Kumar Das and his team also documented important avifaunal species like Baikal Bush Warbler (*Locustila davidi*), White-browed Crake (*Amauronia cinerea*), critically endangered White-bellied Heron (*Adria insignis*) White-rumped Vulture (*Gyps bengalensis*), Slender-billed Vulture (*Gyps tenuirostris*), Baer's Pochard (*Aythya baeri*) and endangered species namely White-winged Duck (*Asarcornis scutulata*) Black-bellied Tern (*Sterna acuticauda*), Yellow-breasted Bunting (*Emberiza aureola*) since last 10 years. Some endangered birds were seen only once or twice during this period.

6. The above observation on the biodiversity of Baghjan and surrounding areas indicates the fragility of the eco-system marked by a complex food web with the presence of micro phytoplankton to large mega fauna in the landscape that also includes human settlements. Therefore, any major disturbance like oil/gas spills may seriously affect the whole ecosystem of the landscape.

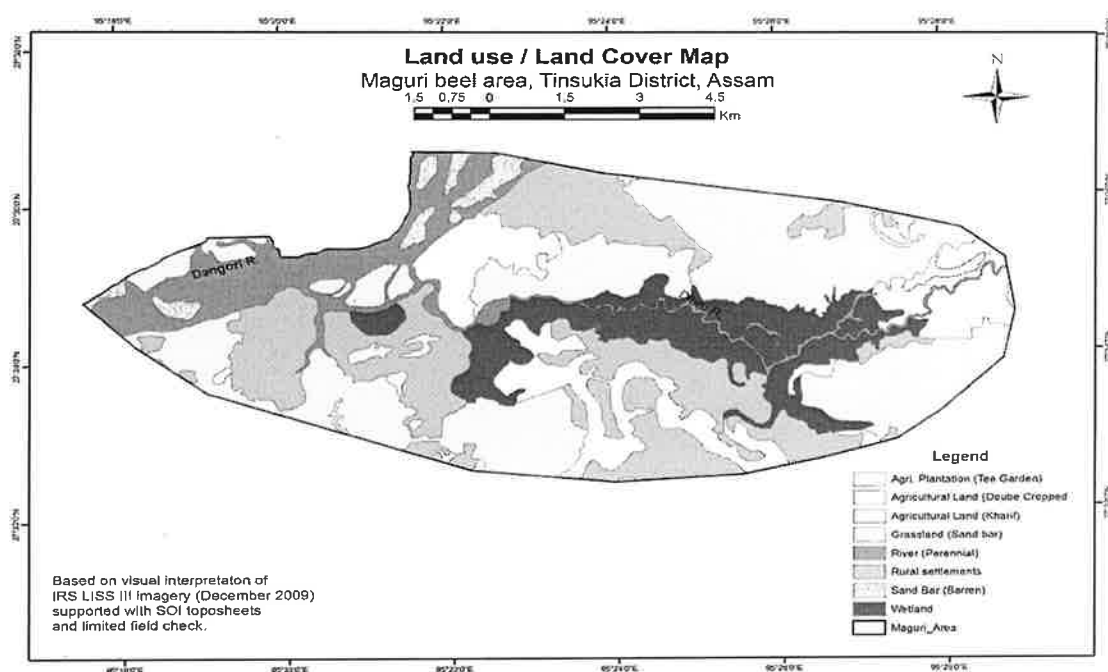


Fig.3: Landuse/Landcover map of Maguri-Motapung Beel (**Source:** Map prepared by Prasanna Boruah, Sr. Scientific Officer, ARSAC)

Chapter – IV

Baghjan Oilfield and Well Baghjan-5

The following section is discussed in two parts. The first part presents a comprehensive discussion on the Baghjan Oil Field and Well Baghjan-5, including the observations and findings of the Committee on the causes of the blowout and explosion of Well Baghjan-5 based on preliminary assessment. The second part presents *prima facie* findings on issues of compliance by OIL of Environmental safeguards as mandated under the regulatory framework.

A. THE BAGHJAN OIL FIELD

This section draws its analysis based on the documents and technical data furnished by OIL in pursuance of the multiple queries raised by the Committee till date. The section provides a brief summary of the historical and production background of the Baghjan field, Well Baghjan-5 while enumerating the probable causes of the blowout on 27.05.2020 and the subsequent explosion on 09.06.2020. It also recommends key safeguards that need to be implemented urgently to avert such eventualities in the near or distant future.

I) Historical background of Baghjan Field

1. The Baghjan field is located in Doomdooma Revenue Circle of the district of Tinsukia in Upper Assam, about 61 Km from OIL Head office at Duliajan via Ragorh Road and NH-15 and/or via Makum Bypass, which is about 76 kms.
2. OIL discovered this field in 2003 after drilling its first exploratory Well Baghjan-1. So far, all total 10 exploratory wells were drilled, and target depth of wells are around 3800 to 4300 Mtr. The area of the Baghjan field is about 20 Sq. Km. The estimated Oil 2P Reserve is about 13.59 MM3 and estimated Recoverable Reserve is about 2.785 MM3. Non-associated estimated 2P Gas Reserve in place is 13.84 BCM and Recoverable Gas estimated as 25.60 BCM. Associated 2P gas Reserve in place estimated is 13.84 BCM and Recoverable Gas estimated as 5.99 BCM. Reservoir Pressure varies from 402 Kg/ Sq. Cm to 429.5 Kg/Sq. Cm i.e. almost Hydrostatic Pressure. There are mainly three major Hydrocarbon bearing i.e. Oil & Gas horizons found in the Baghjan Field namely ;

- (i) LANGPAR, 3870 Mtr, Original Formation Pressure 422kg/cm²
- (ii) LK+Th, SG III+IV and SG I+II, 3781 to 3729 Mtr, Original Reservoir Pressure Hydrostatic +10%.
- (iii) NARPUH, 3673 Mtr, Original estimated Reservoir Pressure Hydrostatic +10%.

All three Zones lie in the depth range of 3630 to 3900 Mtr TVD. The age of multiple sand reserves discovered are of Palaeocene – Lower Eocene Age.

a. Development of Baghjan Field

The Baghjan Field development started from December 2005 after successful completion of Well Baghjan-2. and all total 16 Development wells were successfully drilled and completed. Total wells in this field are 26 Nos (10 Exploratory and 16 Development). Type of wells are (1) Vertical -1No (Baghjan -1), (2) J bend 8 Nos, (3) S profile - 17 Nos. No Horizontal or ERD wells have been drilled till date. But there is a plan to drill ERD wells to target the prospective sand lying below the DSNP, which is about 1 Km away from the main Baghjan field.

b. Production History of Baghjan Field

Commercial Oil production started in December, 2005 after successful completion of Well Baghjan-2 in Bottom most sand i.e. LANGPAR sand. The Production of the field gradually increased and reached a peak production of about 910 M³/Day in March 2012. Thereafter, the Oil production showed a decline trend and reached a level of 630 m³/Day in September 2016 with increased water cut. However, after drilling few more development wells production of Oil increased to level of 1000 M³/Day in November 2017. Current production of Baghjan Field is 950 M³/day Oil, 1.29 MMSCMD Gas and 280 M³/Day water. The initial Reservoir Pressure was 422 Kg/Cm² at a depth of 3647 Mtr which was 58 Kg/cm² above Hydrostatic as recorded in Baghjan Well-1 in April 2003. The current Reservoir pressure is around 411.2 Kg/Cm² at a depth of 3977 Mtr recorded in May 2020. Present Production of the Baghjan field is Oil + Condensate 950 M³/Day, Water 284 M³/day and 1.3MMSCMD Gas. Estimated Loss of Production due to blow out at Well Baghjan-5 is 90 to 95000 M³ of Gas and 10 to 15 M³ of Condensate per Day.

II. Well Baghjan-5

1. Well Baghjan-5 was spudded on 20.11.2006 and successful drilling to target depth of 3904 completed on 12.03.2007. This is a 'S' profile deviated well and 4 stage casing Policy adopted in this well.

(i) 20 inch Conductor casing up to 200 Mtr and Cemented up to surface.

(ii) Well then deviated from 20-inch casing shoe (KOP) and slowly built up angle to maximum 26 degree at depth 811 Mtr. measured depth and then slowly dropped the angle and it is almost vertical at measured depth at 1499 Mtr. 13 3/8 Casing was lowered up to 1500 Mtr and cemented with cement rise inside 20-inch Casing.

(iii) Well was then drilled with 12 1/4 inch Bit to a depth of 3365 Mtr and lowered 95/8 inch casing Shoe at 3336.45 Mtr and cemented the casing.

(iv) Well was then drilled with 8 1/2 Bit to a target depth of 3904 Mtr and 5 1/2 Casing was lowered.

Keeping Shoe at 3899.57 Mtr with Float Shoe at 3876.46 Mt and cemented with cement top at 3360 Mr. CBL VDL recorded and decided to complete the well in bottom most LANGPAR sand.

a. Production Testing of the Well Baghjan-5

1. Initially the well was perforated at depth 3869.5Mtr. to 3872.5 Mtr. There was an immediate pressure build-up of 48 Kg/cm² in tubing. On opening the well to well head set up (Baghjan-2) through 4 mm Bean it produced mostly gas. However, detailed production testing could not be done due to non-availability of facilities at that time. So, well was killed with 85 lbs/cu ft mud and plugged back by placing a Bridge Plug at 3868 Mtr. Subsequently, open-ended tubing was lowered to top of Bridge Plug and tested the plug at 1500 psi found ok, changed over from mud to water and tubing was pulled up to 496 Mt and well was kept shut in.

2. In March 2015, a work over rig was deployed to recomplete the well. The Bridge plug then milled and pushed down to Float Collar at 3876. CBL-VDL was recorded again from 3875 Mtr to 3263 Mtr on 29.3.2015 which showed good isolation against prospective sand and also recoded MIT log which showed no damage to casing.

The well was then perforated at depth 3869.5 Mtr to 3872.5 Mtr and set a Hydraulic Packer at 3818 Mtr but well-kept shut again due to non-availability of testing facility.

3. The well was actually put on production from September 2015 and cumulative production up to March 2020 was 191.83 MMSCM of Gas and 44180 M3 of Condensate. Recently, it was observed that the well was producing Gas from Gas Cap of BGN001 block which may lead to faster reservoir pressure drop resulting lesser recovery. So, it was decided to permanently plug back this Zone i.e. LANGPAR SAND and to recomplete the well in next upper sand called LK+Th sand at depth 3760 Mt.

b. Work Over Operation of Well Baghjan-5

1. The Mobile work-over rig of M/s John Energy Ltd was deployed at Well Baghjan-5 on 19.04.2020. The objective of the Work Over was to permanently isolate the earlier producing sand i.e. LANGPAR SAND at depth 3870 Mt. Complete well in upper Lk+Th I+II sand at depth 3739 Mtr. Accordingly, this work over rig was deployed. During this work over operation, first, tubing was perforated above Packer (3818 Mtr) and well was circulated with 73 Lb/cuft sodium format brine solution and killed the well. There was no flow observed. Packer was then unset by giving pull and pulled out of hole. Carried out a trip to bottom i.e. up to 3876 Mtr and a Bridge Plug was set by Schlumberger Logging Services (hereinafter referred to as SLB) at 3865 Mtr and tested at 1000 psi and found holding. Lowered OEDP up to top of Bridge Plug and changed over well fluid by water and found well stable. Pulled out tubing. Recorded CBL-VDL-CAST from 3862 to 3600 Mtr. Though Cement Bond found poor against Zone of interest but good Bond was found above and below the objective sand. And no damage found in the casing. On 14.05.2020, a Retainer Packer was set at 3590 Mt, nearly 145 Mt above the intended perforation Zone. Lowered tubing with TSA and stabbed the retainer Packer. On 18.5.2020, Wire line 2 1/8 inch Power Enerjet Perforation Gun was then lowered by SLB through tubing and passed through the packer and perforated casing in the range 3731.5 to 3737.5 Mtr. Gun was pulled out but observed build up pressure gradually in tubing as well as in annulus of tubing and casing i.e. SITP: 4400 Psi and SICP: 3900 Psi. Shut the well and well was kept under observation. This development indicated that TSA assembly was not working as SICP of the magnitude nearly equal to SITP was observed. This was an unexpected development

and needed to be rectified. All those subsequent operations carried out were to rectify the TSA leakage problem. On 21.05.2020, SLB perforated the tubing at 3574 Mtr and while perforating SLB observed there was pressure to the extent of 2200 Psi in the tubing and as they used wire line BOP during perforation so could pulled out their perforation gun after perforation of the tubing. Pumping lines were connected to the well and well was killed with 73 Lb/cuft Sodium Format Brine solution. Further, TSA was pulled out along with tubing. Mid of pulling out of Tubing while testing the well head, found WF spool was leaking. Another problem cropped up. Then, it was decided to isolate the already perforated Zone i.e. Lk+Th sand first with cement plug to repair/ replace WF spool before completing the well in the already perforated Zone of Lt+Tk sand at 3731 to 3737 Mtr. Had there been no leakage in WF spool the well could have been successfully completed with new TSA and by stabbing the already set packer at 3590 Mtr. But leakage in WF spool during testing changed the priority of operation. The Well had and other surface equipment should have been tested before perforation as per Standard Operating Procedure (SOP).

c. Cement Plug Job Plan to create a safety barrier inside the casing to avoid any flow during replace/change of WF spool

It was decided to place a Cement plug at depth 1000 to 900 M. Well was stable with 73 Lb/Cuft Brine solution from 22.05- 26.05.2020. At depth 1000 Mtr casing has a deviation of nearly 26 degree. On 25.05.2020, Cement Plug job plan was planned with an instruction to give WOC 48 hrs before pulling out of string and removal of BOP. In the plan it was mentioned to lower 2-7/8 inch tubing to place the plug but in actual 2-7/8 inch drill pipes were used. But this change of decision was not properly recorded in execution report. Also, plan did not mention about to tag and test of Cement Plug to check its integrity after setting of cement. Accordingly, Cement Plug was placed on 26.05.2020 and well was kept on WOC from 4 PM of 26.05.2020. However, as per written instruction of Installation Manager (hereinafter referred to as IM) to Driller Contractor after 12 hours of WOC Drill Pipes were pulled out. As per DPR of 27.05.2020, Driller recorded that he was advised telephonically by Production Engineer (hereinafter referred to as PE) to nipple down BOP after pulled out of drilled pipes from Well but it was denied by PE. But Driller removed Flow Nipple, Riser and also BOP in

the morning on 27.05.2020 and at that time no senior officers like Tool Pusher from Contractor's side, IM or PE from OIL were present at site. After nipple down of BOP while removing the WF Spool at about 8.55 am as per DPR of 27.05.2020, Driller observed Well is flowing slowly. Driller then informed telephonically his Tool pusher about the flow from well who then informed IM and PE. As there was no safety system to close the well, IM instructed over phone to lower immediately 10 doubles of tubing probably with an idea to put back tubing hanger cone and E-Mass Tree to stop the flow. But at that moment PE suggested to lower D/P instead telephonically. Tool pusher then talked to PE over phone that with D/P it would be difficult to place tubing hanger, PE then agreed to lower tubing in doubles. He decided to lower Tubing in single. In this process of telephonic communication among senior officers ; precious time was lost and the well became very active and well fluid started gushing out with force. Though Driller tried to lower one single tubing with tubing hanger cone but could not push down, rather well force thrown out the tubing and cone and the full-fledged blowout of Well Baghjan-5 took place at 10.30 am in the morning of 27.05.2020 i.e. after 18 hours and 30 minutes of WOC. It is observed that the well gave nearly one and half hour time from start of the flow to full blow-out but precious time was lost in telephonic decision making, whatever attempt made failed to shut the Well.

III. Observations and Findings by the Committee

1. The well Baghjan-5 was very successfully drilled by OIL in 2006 to a target depth of 3900 Mtr and the well was completed with 5-1/2 Production casing. This is a deviated well of 'S' Profile. Built up angle started from 20-inch casing shoe i.e. from 200 Mtr and maximum angle achieved at a depth of 880 Mtr and slowly angle was dropped to Zero and well became almost vertical at depth of 1499 Mtr. A horizontal drift of nearly 380 Mtr achieved. In this well, three main pay Horizons were encountered. The Bottom most sand is called Langpar Sand at a depth of 3870 Mtr, 2nd Zone is called Lk+Th sand SG III+IV and Lk+Th Sand SG I+II at depth 3781 Mtr and 3729 Mtr and 3rd Zone is called Narpuh sand at 3673 Mtr.

2. Though drilling of this well was completed in 2007 but due to non-availability of facility at site, actual production of gas and condensate started in September 2015. Initially, the bottommost zone i.e. LANGPAR Sand was perforated at

depth 3869 to 3872 Mtr and completed the well with Packer set at depth 3818 Mtr. The well so far up to March 2020 produced 192 MMSCM of Gas and 44200 M3 of Condensate. However, recently OIL found that this well was producing from Gas cap and if such production continues it will reduce the reservoir pressure and ultimately recovery of Hydrocarbon will be less. Therefore, it was decided to shut this zone permanently and to produce from 2nd Zone i.e. Lk+Th sand at depth 3739 Mtr. Formation pressure of this Zone was estimated to be Hydrostatic +10% or so. For this purpose, the Work-over rig was deployed in this well in April 2020. Accordingly, bottom most producing zone was successfully isolated by setting a Bridge plug set at 3868 Mtr and tested at 1500 psi and found OK. Well fluid was then changed to water and found well stable. On 14.04.2020, a retainer packer was lowered through wire line and set at depth 3590 Mtr nearly 145 Mtr above the intended zone of interest. Then lowered 2-7/8 Vam Premium tubing with TSA (Tubing Seal Assembly) and stabbed the retainer packer which was set at 3590 Mtr. On 18.5.2020, SLB lowered 2-1/8 inch Power Enerjet wire line Perforation Gun through tubing and then through packer and perforated the casing at depth 3731.5 to 3737.5 Mtr. Perforating Gun could be pulled out but observed pressure build up gradually in tubing as well as in tubing annulus i.e. SITP rose to 4400 psi and SICP to 3900 psi. Actually only, SITP should have been observed, but in this well SICP was also observed almost equal to SITP which indicated two things-

- (i) Either Packer was leaking ;
- (ii) TSA was not able to properly seal the bore of the packer.

3. This was unexpected and so had to be rectified before proceeding for further action of completion. OIL decided to kill the well first and then to pull out TSA with Tubing. Accordingly, on 21.5.2020, SLB perforated the tubing at 3574 Mt and well was killed with 73Lb/cu ft Sodium Format brine solution. As per plan, TSA with Tubing was pulled out but midway decided to test the integrity of Well Head. On testing, it was found the primary and secondary seals were not holding. That became another problem in the well cropped up. As per Standard Operating Practice, the integrity of surface equipment like Well Head, BOP, its Manifold etc. are to be tested before any critical operation. Zone perforation being a critical operation testing of surface equipment should be done before perforation. Now priority came up to repair/ replace well head

before proceeding further. OIL planning group decided to place a cement plug as a secondary safety barrier (First primary safety barrier was the Hydrostatic pressure of work over fluid i.e. 73Lb/Cu ft sodium Formate Brine in the well against the already perforated zone) as BOP had to be nipple down first before repair/replace of well Head Spool. They decided to place 200 Mt High viscous pill from 1200 to 1000 Mtr and then Cement Plug of 100 Mtr from 1000 to 900 Mtr. Plan was made to place cement plug by lowering 2-7/8 tubing but in actual 2-7/8 Slim hole Drill Pipe were used to place the Cement Plug. Why it was decided to place the 2nd safety barrier at such shallow depth when zone of perforation was at 3737 Mtr and Packer was set at depth 3590 Mtr. is uncertain. The Committee awaits the reply from OIL as to why they planned to place the cement Plug at such a shallow depth. Normally, the secondary safety barrier should have been near to the perforated zone. Secondly, in the plan of cement plug job, no tagging and testing of cement plug to check its integrity was mentioned. At the casing depth of 1000 Mtr. well was having an angle of 26 to 27 degree. Placement of a Cement Plug in a deviated casing is a very tricky job therefore, it was necessary to tag and test the plug to check its integrity. More so, it was planned as a safety barrier. In the Cement Job Execution Report as per DPR of 27.05.2020, after placing Cement Plug, Drill Pipes were pulled out from 997 Mtr to 657 Mtr (340 Mtr) and during reverse wash found two tubing volume of cement slurry surfaced. This indicated that during placement of cement plug cement slurry channeled and occupied much more height than planned of 100 Mtr. But probably nobody noticed that. In such situation, the Cement Plug should have been tagged and tested. Moreover, it was also necessary to check such plug negative pressure tested. These were not done in this well. Further, after WOC of 12 hours, as per instruction of Installation Manager (IM) D/P were pulled out of Hole by 7 am. Driller recorded in DPR of 27.05.2020, that he received instruction from Production Engineer (PE) in the morning at 7.30 am to nipple down BOP. Accordingly, Driller dismantled Riser Nipple, Spacer Spool and BOP. This was denied by PE having given that instruction to Driller. Whatever it might be, but this action at site without presence of senior officers from Contactor and OIL was a gross violation of Standard Operating Practice. Moreover, WOC was 48 hours as per plan but dismantle of BOP was done after 15-16 hours of WOC. Once BOP was removed there was practically only one safety barrier i.e. Hydrostatic Column of well fluid as integrity of cement plug as secondary safety barrier was unknown. After dismantling of BOP, well started flowing which was

noticed by Driller who immediately informed the Tool Pusher (appointed by the Contractor) at about 8.55 am, who then informed the IM and PE. IM telephonically and was advised to instruct the Driller to lower 10 doubles of tubing immediately as Tubing were stacked in doubles in stands against Monkey Board. But PE did not agree to lower Tubing rather passed instruction telephonically to lower D/P instead. Tool pusher then talked to PE that if D/P was lowered it would not be possible to lower Tubing hanger cone to shut the well. Then PE agreed to lower Tubing in double. But then Driller said it was not possible to lower Tubing in Double as D/P stands are in front of Tubing Stand. This was another mistake on the part of Driller as while stacking D/P and Tubing, both should have been stacked separately in both sides of Monkey Board. Therefore, it was decided to lower tubing in singles which was a time consuming job. In this process precious time was lost. Though Driller tried to lower/push one single Tubing with tubing hanger cone, but by that time well pressure increased to such an extent that both tubing and hanger cone were thrown out of casing. The full blowout of the Well Baghjan-5 started at 10.30 am on 27.05.2020. Though the well gave more than one hour to take some corrective measures but precious time was lost in decision making as no senior officer were at site, only telephonic discussions were going on. Moreover, nobody suggested to make attempt to put back BOP at the beginning of activity, but all thought that it would take more time. PE and Tool pusher arrived at site at 10.10 am at the verge of blowout of the well. Arrangement was then made to spray water by fire tenders to cool down the well mouth to avoid catching fire. Unfortunately, the well caught fire in the morning of 09.06.2020. Presently, ONGC, OIL and well expert M/s. Alert International are working as a team to cap the well.

a. Cause of the Accident

1. After going through the replies received from OIL to the queries raised by the commit and having reviewed the DPR from 20. 05- 27.05.2020, *prima facie*, the Committee could identify, pending further investigation, the following probable causes of the accident i.e. blowout of Well Baghjan-5.

(i) There was a flaw in the operational plan. The decision to place a Cement Plug at a depth of 1000 Mtr in a inclined portion of the well (26 to 27degree) as a secondary safety barrier itself was flawed. The cement plug should have been placed as near to the perforated Zone and in this case near to the Packer i.e. about 100 Mtr above packer by

placing a 100 Mtr Sand plug above Packer to protect Packer from cement cutting falling during cement drilling.

(ii) Planned not to tag and test the Cement Plug was another flaw in the planning of Cement Plug job. It was planned to place 100 Mtr Plug but cement slurry surfaced during reverse circulation at a depth of 655 Mtr i.e. after pulled out of D/P by about 340 Mtr. Probaby nobody read the cement plug job execution report of 27.05.2020. In such a situation, Plug should not only have been tagged and tested but also negatively tested to check its integrity of purpose as safety barrier before nipple down of BOP. This was a mandatory requirement as per the Standard Operating Procedure.

(iii) Moreover, when the cement slurry starts to set, slurry loses water and static gel develops. At this time, cement column would behave like water column and reduced Hydrostatic Head. Secondly, in static condition of gas well i.e. WOC time when well fluid was static, gas bubble enters slowly from the perforated zone and gas bubbles percolated up, and expanded and burst at surface. This process continued in static condition of well at a faster rate being well fluid was brine. Same phenomenon would have been little slow in case of viscous fluid like mud. But in the process, Sp gravity of fluid in the well was reduced slowly. In this well as cement plug was placed much above the perforated zone i.e. nearly 2700 Mtr. As a result, gas bubbles diluted a long column of brine solution in the well and so there was reduction of Hydrostatic Head of brine solution which was just above formation pressure of the perforated gas zone. The combination of gas bubble phenomenon and reduction of head due to long contaminated cement plug resulted reduction of Hydrostatic head in the well after 13-14 Hours of WOC and well became active. And as there was no tested secondary safety barrier in the well after removal of BOP, well slowly started flowing and within one and half hour or so final blowout of the Well Baghjan-5 took place. This is therefore, a reason to place cement Plug near to the perforated Gas Zone to work as secondary safety barrier.

(iv) Against one of the queries raised by the Committee as to why it was not planned to set retrievable Bridge Plug (RBG) as a safety barrier in place of Cement Plug, OIL replied that use of Retrievable Bridge Plug is not in practice in OIL. The Committee found this to be surprising. SLB logging contract with OIL is in place, only needed a provision in contract to use Retrievable Bridge Plug as and when required basis. Such

standard provisions in ONGC contract with SLB are there with well logging contract to utilize such services as and when required. Moreover, ONGC departmental Production Team also does this type of job departmentally. Setting of Retrievable Bridge Plug to isolate the Gas zone would have been more convenient and also time saving.

- (v) In the plan of cement plug job, it was mentioned WOC as 48 Hours. But in actual D/P were pulled out of casing after 12 hours of WOC and BOP was removed from well head after 15 Hours of WOC. This was a gross violation of written instructions of WOC of 48 Hours in the Plan. It is very hard to believe that Contractor Driller would act on his own to remove BOP after 15 hours of WOC against a written instruction of WOC of 48 hours unless Driller gets some instruction in writing or telephonically from someone from OIL.

2. From above discussions, it seems that Planning group and Execution team of OIL did not take the Cement Plug Job very seriously though it was placed as a secondary safety barrier before nipple down of BOP. Probably, the planning group relied mostly on primary safety barrier i.e. hydrostatic head of well fluid which was sufficient to stop any activity and cement plug was just an additional barrier, even though it failed would not matter. Therefore, it was first decided by Planning Group to place the plug at a shallower depth inside the casing, testing of the plug to check its integrity was not planned considering it was not necessary. While execution of cement plug job also nobody bothered to watch how it was placed, cement slurry channeled and rose much more height than planned and cement slurry design for this plug job was also faulty. Only cement additive Retarder was used to give longer IST without control of water loss from cement slurry after placement. Vital parameter of Compressive strength was also not measured at BHCT (Bottom Hole Circulating Temperature) of 46 degree centigrade at plug depth of 1000 MT. So plug strength was not known.

3. **So, in summary we find following probable reasons of this blowout :**

- (i) **There was deficiency in understanding of the gravity of a critical operation like removal of BOP without having a confirmed and tested secondary safety barrier.**

(ii) **There was deficiency in proper planning of critical operations. There was a clear mismatch between Planning and its Execution at site and deviations from the Standard Operating Procedure (SOP).**

(iii) **There were serious deficiencies of proper level of supervision of critical operation at well site both from the Contractor as well as from OIL.**

b. Fixation of Responsibility for the Accident

1. The Committee has undertaken a preliminary investigation of the various activities that happened in the Well Baghjan-5 during the work over operation based on written documents received from OIL, replies from OIL against our various queries through mails. Replies on further queries and personal interaction with concerned officers and OIL management are pending. At present, investigations are ongoing, and the Committee will be able to give a clear finding on whom to fix the responsibility for this accident in its subsequent Reports.

c. Immediate Preventive Measures to Avoid Similar Blowout and Explosions

1. **Based on the preliminary assessment, the Committee presents the following preventive measures which are subject to ongoing investigations.**

- i) It is pertinent to note that the handling of Gas wells is different than Oil wells. Therefore, it is necessary to have different Standard Operating Process for Gas wells.
- ii) Isolation of any Hydrocarbon bearing Zone by a secondary barrier must be taken very seriously and needs to be planned properly. In such well situation the safety barrier cannot be relied upon only on Hydrostatic Head of well Fluid. There ought to be proper secondary safety barrier, which are tested both positively and negatively to check its integrity before attending any critical operation in the well like nipple down of BOP.
- iii) Placement of secondary safety barrier must be placed as near to the perforated zone, and cannot be placed anywhere in the well.
- iv) Placement of Cement Plug is to be always done in the vertical portion of Casing. If required to place Cement Plug in a deviated well, either a perforated Tubing/Drill pipe shoe is to be used and the string ought to be rotated during placement of cement slurry by using swivel joint or use the swivel joint with Kelly of the Rig. After

balancing the Plug, the string needs to be pulled out slowly and while breaking the joints, Rotary is to be used to break the joint which will help cement slurry to spill all around and also to fall smoothly from inside string.

Cement Slurry Design : -

v) It is important to always design Cement Slurry with water loss additive to control water loss from cement slurry to bare minimum during setting of cement. Retarder may also be added to get the desired thickening time. Compressive Strength of the designed slurry are to be tested at 12hours, 24 hours and 36 hours to decide upon WOC time.

Contingency Plan

vi) Before doing any critical operation in well, a comprehensive contingency Plan must be in place to take immediate action to face any eventuality. In this particular well due to not having any such plan, driller at site alone was confused what to do when he observed well activity. Telephonic communication by IM to lower Tubing in Double, PE communicated to lower D/P instead. As a result, precious time was lost. Lowering of few Tubing with hanger cone would not had helped unless Xmas tree was installed. There were few probable options available to save this well.

vi.a) To make an attempt to nipple up BOP again. Had the BOP been simply placed over the well head flange (7-1/16") within the available time, bolting of flange, connecting to choke manifold, flow lines etc. could have been done during flowing well condition also. This was not attempted considering it would take much more time.

vi.b) Alternately, Tubing Hanger (Cone type) could have been picked up with one single Tubing. The single tubing with cone could have been lowered and cone installed inside well head. The X-Mas Tree then placed with the X over spool, if required. Subsequently, the Crown Valve be closed and the side valves kept open for well flow to continue, if required. It is important to tight all the flange bolts. Then connect the pumping lines to flow arm of X-Mas Tree, open the valve, close side valve of X-Mas Tree and then Brine or Mud can be bulldozed to kill the well. The Committee is of the view that this operation would not have taken much time.

2. The Committee suggests the following procedure to be followed for placement of secondary safety barrier in different scenarios.

a. SCENARIO-1: PERMANENT ISOLATION OF A PRODUCING ZONE.

1. Perforate the tubing above Packer and circulate the well with kill fluid i.e. to have Hydrostatic pressure more than formation pressure of the Zone. Observe the well, if stable pull out tubing string, Run in a permanent Bridge Plug with tubing and set just above the Packer or zone to be isolated. Test the Bridge Plug at 1500 to 2000 psi. If found holding. Circulate the well with water to check integrity of Bridge Plug under negative Head. Next, place a cement Plug of 50 Mtr above the Bridge Plug, tag and test the plug at 2000 Psi to ensure permanent isolation of the Zone.

b. SCENARIO-2: ISOLATION OF ACTIVE PERFORATED ZONE TEMPORARILY LIKE WELL BAGHJAN-5

1. Before any critical operation like perforation of the Zone, the surface equipment like Well Head, BOP, Choke Manifold are to be tested first. In this particular well testing of these equipment were done after perforation of the zone and found Well Head seals were leaking, required to isolate the zone which was already perforated for repair or replace the Well Head.

2. Now in a well situation when well was already perforated and Packer was set above perforation like Well Baghjan-5, the Committee recommends the following steps to follow.

i) Kill the well with Kill Fluid, observe the well. If stable, pull out Tubing String, lower a Tubing conveyed Retrievable Bridge Plug (RBG) with a perforated tubing single at bottom i.e. just above setting tool and set RBG just above Packer. This Packer can be retrieved after the job with tubing and reused.

ii) Disengage Tubing setting tool from Packer, Test the packer at 2000 psi. If not holding, retrieve Packer and lower another Packer and reset again. Disengage setting tool from Packer and test the Plug at 2000 Psi. If found OK, displace well fluid with water to check integrity of Packer under negative Hydrostatic Head. Observe the Well for 2 to 3 Hours. If OK, replace the water in the well with Kill fluid and observe the well, if OK,

pull out string. To be in safer side, a cement Plug should also be placed at a shallower depth in vertical portion of casing. First place a high viscous Plug of 200 Mtr followed by 100 Mt Sand Plug below the intended Cement Plug. These steps are suggested before placement of Cement Plug to avoid cement cutting falling during drilling of cement at top of RBG which would require to be retrieved later. Tag and Test the Cement Plug after WOC of 24 hours. If OK, pull out string. Check contingency plan and when ready then go for dismantle of BOP by keeping constant watch on the fluid level of the well. The operation of nipple down of BOP must be done as far as possible at Day time and also in presence of senior responsible officers.

c. SCENARIO -3: IF BOTTOM ZONE IS ISOLATED BY PERMANENT BP, NEED ARISES TO NIPPLE DOWN BOP.

i) In such situation though BP was tested positively and negatively even then the recommendation of the Committee would be to place a Cement Plug at a shallower depth in vertical portion of casing, which should be tagged and tested before nipple down of BOP.

B. COMPLIANCE OR OTHERWISE OF ENVIRONMENTAL SAFEGUARDS AND MANDATORY CONSENT

1. Based on the aforesaid discussion and having reviewed the documents and responses received from OIL, it is evident that OIL was engaged in multiple projects with regard to the Baghjan Oil Field since 2006. Each of these projects required OIL to be compliant to the statutory requirements under existing environmental regulatory framework including the Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, The Environment (Protection) Act, 1986, Hazardous Waste (Management and Handling) Rules, 1989, and more recently the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016. The Committee is in the process of reviewing the various legislations / rules etc. along with the documents furnished by the Department of Environment & Forest, Government of Assam, the Central Pollution Control Board, the Pollution Control Board, Assam, Assam State Biodiversity Board and OIL, to assess and evaluate whether the legal obligations under the aforesaid environmental regulatory framework were implemented by OIL and the other stakeholders.

2. In this context, the Committee would like to draw attention to certain breaches of environmental regulations, which are discussed herein below. Based on the information gathered thus far, the Committee has been able to arrive at key findings with conclusive evidence *inter-alia* of violations and non-compliance by OIL of key environmental safeguards and safety oversight that appears to render the environmental protections, particularly under the Air (Prevention and Control of Pollution) Act, 1981, Water (Prevention and Control of Pollution) Act, 1974, Hazardous Waste (Management and Handling) Rules, 1989 and more recently the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 ineffective.

I. Consent to Establish and Consent to Operate

1. Statutory obligations mandate that all offshore oil drilling projects adhere to strict compliance of obtaining consent under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under the Hazardous Waste (Management & Handling) Rules, 1989 and more recently the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

2. Consent under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 are to be obtained in a phased manner: firstly, by obtaining a Consent to Establish (hereinafter referred to as CTE/NOC) followed by a Consent to Operate (hereinafter referred to as CTO). Relevant provisions of the CTE/NOC and CTO under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 are extracted below for ready reference.

Water (Prevention & Control of Pollution) Act, 1974 (hereinafter referred to as the Water Act)

Section 25. Restrictions on new outlets and new discharges

(1) *Subject to the provisions of this section, no person shall, without the previous consent of the State Board-(a) establish or take any steps to **establish** any industry, operation or process, or any treatment and disposal system or any extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or*

sewer or on land (such discharge being hereafter in this section referred to as discharge of sewage); or

- (b) bring into use any new or altered outlet for the discharge of sewage; or*
- (c) begin to make any new discharge of sewage:*

PROVIDED that a person in the process of taking any steps to establish any industry, operation or process immediately before the commencement of the Water (Prevention and Control of Pollution) Amendment Act, 1988, for which no consent was necessary prior to such commencement, may continue to do so for a period of three months from such commencement or, if he has made an application for such consent, within the said period of three months, till the disposal of such application.

(2) An application for consent of the State Board under sub-section (1) shall be made in such form, contain such particulars and shall be accompanied by such fees as may be prescribed.]

(3) The State Board may make such inquiry as it may deem fit in respect of the application for consent referred to in sub-section (1) and in making any such inquiry shall follow such procedure as may be prescribed.

(4) The State Board may-

- (a) grant its consent referred to in sub-section (1), subject to such conditions as it may impose, being-*
 - (i) in cases referred to in clauses (a) and (b) of sub-section (1) of section 25, conditions as to the point of discharge of sewage or as to the use of that outlet or any other outlet for discharge of sewage;*
 - (ii) in the case of a new discharge, conditions as to the nature and composition, temperature, volume or rate of discharge of the effluent from the land or premises from which the discharge or new discharge is to be made; and*
 - (iii) that the consent will be valid only for such period as may be specified in the order, and any such conditions imposed shall be binding on any person establishing or taking any steps to establish any industry, operation or process, or treatment and disposal system or extension or addition thereto, or using the new or altered outlet, or discharging the effluent from the land or premises aforesaid; or*

(b) *refuse such consent for reasons to be recorded in writing.*

(5) *Where, without the consent of the State Board, any industry, operation or process, or any treatment and disposal system or any extension or addition thereto, is established, or any steps for such establishment have been taken or a new or altered outlet is brought into use for the discharge of sewage or a new discharge of sewage is made, the State Board may serve on the person who has established or taken steps to establish any industry, operation or process, or any treatment and disposal system or any extension or addition thereto, or using the outlet, or making the discharge, as the case may be, a notice imposing any such conditions as it might have imposed on an application for its consent in respect of such establishment, such outlet or discharge. (6) Every State Board shall maintain a register containing particulars of the conditions imposed under this section and so much of the register as relates to any outlet, or to any effluent, from any land or premises shall be open to inspection at all reasonable hours by any person interested in, or affected by such outlet, land or premises, as the case may be, or by any person authorised by him in this behalf and the conditions so contained in such register shall be conclusive proof that the consent was granted subject to such conditions.]*

(6) *Every State Board shall maintain a register containing particulars of the conditions imposed under this section and so much of the register as relates to any outlet, or to any effluent, from any land or premises shall be open to inspection at all reasonable hours by any person interested in, or affected by such outlet, land or premises, as the case may be, or by any person authorized by him in this behalf and the conditions so contained in such register shall be conclusive proof that the consent was granted subject to such conditions.]*

(7) *The consent referred to in sub-section (1) shall, unless given or refused earlier, be deemed to have been given unconditionally on the expiry of a period of four months of the making of an application in this behalf complete in all respects to the State Board.*

(8) *For the purposes of this section and sections 27 and 30-*

(a) the expression "new or altered outlet" means any outlet which is wholly or partly constructed on or after the commencement of this Act or which (whether so constructed or not) is substantially altered after such commencement;

(b) the expression "new discharge" means a discharge which is not, as respects the nature and composition, temperature, volume, and rate of discharge of the effluent substantially a continuation of a discharge made within the preceding twelve months (whether by the same or a different outlet), so however that a discharge which is in other respects a continuation of previous discharge made as aforesaid shall not be deemed to be a new discharge by reason of any reduction of the temperature or volume or rate of discharge of the effluent as compared with the previous discharge.

Section 26. Provision regarding existing discharge of sewage or trade effluent.—Where immediately before the commencement of this Act any person was discharging any sewage or trade effluent into a 1[stream or well or sewer or on land], the provisions of section 25 shall, so far as may be, apply in relation to such person as they apply in relation to the person referred to in that section subject to the modification that the application for consent to be made under sub-section (2) of that section 2[shall be made on or before such date as may be specified by the State Government by notification in this behalf in the Official Gazette].

Air (Prevention & Control of Pollution) Act, 1981 (hereinafter referred to as the Air Act)

21. Restrictions on use of certain industrial plants.— [(1) Subject to the provisions of this section, no person shall, without the previous consent of the State Board, establish or operate any industrial plant in an air pollution control area:

Provided that a person operating any industrial plant in any air pollution control area immediately before the commencement of section 9 of the Air (Prevention and Control of Pollution) Amendment Act, 1987, for which no consent was necessary prior to such commencement, may continue to do so for a period of three months from such commencement or, if he has made an application for such consent within the said period of three months, till the disposal of such application.]

(2) *An application for consent of the State Board under sub-section (1) shall be accompanied by such fees as may be prescribed and shall be made in the prescribed form and shall contain the particulars of the industrial plant and such other particulars as may be prescribed:*

Provided that where any person, immediately before the declaration of any area as an air pollution control area, operates in such area any industrial plant, such person shall make the application under this sub-section within such period (being not less than three months from the date of such declaration) as may be prescribed and where such person makes such application, he shall be deemed to be operating such industrial plant with the consent of the State Board until the consent applied for has been refused.

(3) *The State Board may make such inquiry as it may deem fit in respect of the application for consent referred to in sub-section (1) and in making any such inquiry, shall follow such procedure as may be prescribed.*

(4) *Within a period of four months after the receipt of the application for consent referred to in sub-section (1), the State Board shall, by order in writing, [and for reasons to be recorded in the order, grant the consent applied for subject to such conditions and for such period as may be specified in the order, or refuse such consent]:*

[Provided that it shall be open to the State Board to cancel such consent before the expiry of the period for which it is granted or refuse further consent after such expiry if the conditions subject to which such consent has been granted are not fulfilled:

Provided further that before cancelling a consent or refusing a further consent under the first provision, a reasonable opportunity of being heard shall be given to the person concerned.]

(5) *Every person to whom consent has been granted by the State Board under sub-section (4), shall comply with the following conditions, namely:—*

(i) *the control equipment of such specifications as the State Board may approve in this behalf shall be installed and operated in the premises where the industry is carried on or proposed to be carried on;*

- (ii) *the existing control equipment, if any, shall be altered or replaced in accordance with the directions of the State Board;*
- (iii) *the control equipment referred to in clause (i) or clause (ii) shall be kept at all times in good running condition;*
- (iv) *chimney, wherever necessary, of such specifications as the State Board may approve in this behalf shall be erected or re-erected in such premises; and*
- (v) *such other conditions as the State Board, may specify in this behalf; and*
- (vi) *the conditions referred to in clauses (i), (ii) and (iv) shall be complied with within such period as the State Board may specify in this behalf.*

*Provided that in the case of a person operating any industrial plant 3*** in an air pollution control area immediately before the date of declaration of such area as an air pollution control area, the period so specified shall not be less than six months:*

Provided further that—

- (a) *after the installation of any control equipment in accordance with the specifications under clause (i), or*
- (b) *after the alteration or replacement of any control equipment in accordance with the directions of the State Board under clause (ii), or*
- (c) *after the erection or re-erection of any chimney under clause (iv), no control equipment or chimney shall be altered or replaced or, as the case may be, erected or re-erected except with the previous approval of the State Board.*
- (6) *If due to any technological improvement or otherwise the State Board is of opinion that all or any of the conditions referred to in sub-section (5) require or requires variation (including the change of any control equipment, either in whole or in part), the State Board shall, after giving the person to whom consent has been granted an opportunity of being heard, vary all or any of such conditions and thereupon such person shall be bound to comply with the conditions as so varied.*

(7) *Where a person to whom consent has been granted by the State Board under sub-section (4) transfers his interest in the industry to any other person, such consent shall be deemed to have been granted to such other person and he shall be bound to comply with all the conditions subject to which it was granted as if the consent was granted to him originally.*

3. A reading of the aforesaid provisions makes it clear that the CTE/NOC and CTO provided under Section 25 and 26 of the Water Act and Section 21 of the Air Act are *pari materia* except that Section 25 (7) provides for deemed consent to obtain the CTE/NOC under the Water Act. The detailed procedure for obtaining such consents have been prescribed under Rule 25 of the Water (Prevention and Control of Pollution (Assam) Rules 1977 and Rule 26 of the Air (Prevention and Control of Pollution Assam Rules, 1991.

Be it noted that the CTE/NOC and CTO may be obtained through a composite form framed by the Pollution Control Board, Assam for both the aforesaid Acts. Similar authorizations are mandated under Rule 5 of the Hazardous Wastes (Management and Handling) Rules, 1989 and more recently, the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

4. Several representations received from the local stakeholders allege that OIL did not have the mandatory consent and authorization required under the aforesaid Acts and Rules. In fact, subsequent to the Well Baghjan -5 blowout and explosion, the Pollution Control Board, Assam (hereinafter referred to as PCB, Assam) issued a Closure Notice dated 19.06.2020 *inter-alia* on the same grounds. The said Closure Notice was, however, subsequently withdrawn on 22.06.2020 subject to certain conditions, which are being examined by the Committee, at present. Copies of the Show Cause Notice dated 10.06.2020, Reply to Show Cause Notice dated 19.06.2020, Closure Notice dated 19.06.2020, Affidavit filed by OIL India Ltd. dated 22.06.2020 to PCB, Assam and the Letter dated 22.06.2020 withdrawing the Closure Notice issued by PCB, Assam are appended hereto as **Appendix- B Colly**.

5. A perusal of the records produced by OIL and PCB, Assam with respect to the projects pertaining to the Baghjan Oilfield reveals a discernable pattern of alleged infractions of the mandatory consents and authorization required under the aforesaid Acts and Rules.
6. It is a stated position of OIL before the Committee that drilling activity in Well Baghjan-5 first commenced on 20.11.2006. It has been further stated that consent application (CTE/NOC and CTO) were submitted to the PCB, Assam vide OIL letter ref no. S&E/E/20/723 dated 05.07.2006. The said letter is appended hereto as **Appendix-C**. A bare perusal of the OIL letter ref no. S&E/E/20/723 dated 05.07.2006 indicates that vide the said letter OIL has preferred a composite application for both CTE/NOC and CTO for all the 33 drilling locations including Well Baghjan-5. The letter further indicates that submitting composite applications for both CTE/NOC and CTO seemed to be the preferred practice adopted by OIL for all its drilling explorations in Assam. As evident from the discussion in the aforesaid section and as per Section 25 and 26 of the Water Act and Section 21 of the Air Act, the said practice of preferring composite applications for both sets of consent runs completely contrary to the procedure prescribed under the aforesaid Acts and Rules. The reading of the aforesaid Acts and Rules makes it abundantly clear that the procedure established envisages distinct and separate procedures for applications of the mandatory consent and authorizations, each requiring submission of different forms as provided under the Rules along with separate set of documents for verification.
7. Be it stated herein that OIL has placed only the letter ref. no. S&E/E/20/723 dated 05.07.2006 without the relevant supporting documents before this Committee. In absence of any other clarification from OIL and on the face of the records produced, it is evident that OIL has flagrantly violated the procedure envisaged under Section 25 and 26 of the Water Act and Section 21 of the Air Act. It is pertinent to note here that the PCB, Assam has not placed any such document which indicates that the said letter dated 05.07.2006 was approved and that the relevant CTE/NOC and/or the CTE had been granted for the drilling Well Baghjan-5 in 2006. In fact, it can be safely concluded that OIL had never procured or any such CTE/NOC and/or CTO under the aforesaid Acts and Rules in the manner prescribed for drilling operation of Well Baghjan-5 in 2006.

8. The submissions made by OIL in this respect further vindicates this assumption. OIL has stated before the Committee that no query or refusal was ever received from the PCB, Assam. As such, as per the provisions under Section 25 (7) of the Water Act, OIL construed that the consent was deemed. As discussed above, the provision for deemed consent has been made available only in the case of Water Act. The Air Act or the Hazardous Rules do not contain any such provisions for deemed consent. Therefore, even if the submission of OIL is accepted to be true, OIL only had the necessary CTE/NOC under the Water Act for the year of 2006. However, the mandatory CTO was never approved by PCB, Assam under the Water Act and/or the CTE/NOC under the Air Act and/or the CTO under the Air Act. As such, from the face of the records placed before the Committee, it is clear that OIL had flagrantly violated the provision under the Water Act and Air Act for the year 2006-07.

9. Additionally, the provisions under both the Water Act and the Air Act provide that the consent either to establish and/or operate within a period of 4 months from the date of submission of the complete application along with the prescribed fee. Be it stated herein that the records furnished by OIL for the year 2006-07 indicate that the fee for the composite application for CTE/NOC and/or CTO was submitted only on 22.09.2006. Therefore, it can be safely presumed that the CTE/NOC would come into effect vide Section 25 (7) for the Water Act only on 22.01.2007. As mentioned above, OIL has consistently reiterated that drilling activities with respect to Well Baghjan-5 had commenced on 20.11.2006. This admission, by itself clearly indicates that Well Baghjan-5 in 2006 was already in operation before the mandatory consents were approved or 'deemed' to be approved under the Water Act. From the records that have been placed before the Committee, it can be therefore be safely concluded that OIL never had the CTE/NOC and/or the CTO both under the Water Act and/or under the Air Act, when it first started its drilling operations in Well Baghjan-5 in 2006.

10. What is alarming is that the records furnished by OIL and PCB, Assam consistently indicate a clear infraction of environment safeguards as prescribed under the aforesaid laws by OIL, even for the subsequent years. As evident from the reply to the Show Cause Notice dated 19.06.2020 and the records submitted by PCB, Assam, the mandatory consent under the Water Act and Air Act was approved by PCB, Assam only for the years 2008-09, 2012-13, 2018-19.

For the years 2006-07, 2009-10, 2010-11, 2011-12, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2019-20, no consent has been issued by the PCB, Assam as per the records placed before the Committee. This indicates that OIL only had the necessary CTE/NOC under the Water Act for the aforesaid 3 years i.e. 2008-09, 2012-13, 2018-19. From the face of the records placed before the Committee, it is therefore, clear that OIL had flagrantly and consistently violated the provision under the Water Act and Air Act.

11. What is even more alarming is that in the instant case pertaining to the blowout and explosion of Well Baghjan-5, a fait accompli is presented to us. From the documents placed before the Committee, it appears that OIL had no CTE/NOC and/or CTO either under the Water Act and/or the Air Act and/or authorization under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016. Records indicate that during the closure proceedings before the PCB, Assam immediately post the blowout of Well Baghjan-5 and the explosion on 09.06.2020, OIL, in its affidavit has clearly admitted that they did not have the required CTE/NOC and/or CTO for the year 2020-2025. It is stated in their Affidavit dated 22.06.2020, relevant extracts of which read as under :

a. *That with respect to the Consent to Operate, Oil India limited has been regularly applying for Consent to operate NOCs from the State Pollution Control Board, Assam since 2006-07. For the year 2020-25 (5 years period), an offline application was submitted to the Regional Office, Pollution Control Board, Assam vide letter ref no. S&E/E/20/528 dated 05.05.2020. Also vide above letter it was requested to process our last year consent to operate application at the earliest for submission of online Consent to operate applications for the year 2020- 2021, as without disposal of previous proposal another new proposal can't be applied. In response, the regional Office directed to deposit the requisite fee along with the necessary documents and information for the year 2020- 2021 vide mail dated 29.05.2020. However, OIL could not deposit the fee amount till date as the new online portal "Online Consent Management and Monitoring System" is not accepting our user id already registered with the earlier online portal EODB "Ease of Doing Business". That OIL is willing to make the payment along with the application through offline mode in. order to obtain the requisite permissions.*

The aforesaid statement made by OIL in its Affidavit dated 22.06.2020 conclusively proves that OIL did not have the required CTO/NOC and/or CTO under the Water Act and/or under the Air Act and or the authorization under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016. Be it stated herein that the PCB, Assam has not able to place any CTE/NOC and/or CTO for any year including the year 2020 and/or for the Well Baghjan-5.

12. This, leads us to the necessary conclusion that on the day of the blowout of Well Baghjan-5 on 27.05.2020 and explosion on 09.06.2020, OIL did not have the mandatory consents including the CTE/NOC and/or the CTO under the Water Act, Air Act and/or the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016. The omissions on the part of OIL amounts to a clear violation not merely of the statutory mandate but also the conditions that have been stipulated under Clause 10 (iii) and (vi) of the Environment Clearance dated 11.05.2020 with respect to the Extension Drilling & Testing of Hydrocarbons at 7 locations under the DSNP Area, where the blowout and subsequent fire occurred with respect to Well Baghjan-5.

13. **In view of the above discussion and on basis of the submissions and documents submitted by OIL and the PCB, Assam, it is concluded that OIL does not have, till date, the required consent to establish and/or consent to operate to either carry out drilling and testing of hydrocarbons in Well Baghjan-5 under the DSNP Area, except for what has been stated in para 10 above. This indicates a serious and grave infraction against the statutory environmental safeguards, more particularly under Section 25 & 26 of the Water Act, Section 21 of the Air Act, the authorization under Rule 6 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Environmental Clearance dated 11.05.2020 for the said project. This may therefore require scrutiny of all existing projects of OIL in the State of Assam to ascertain if they meet the mandatory requirements of obtaining consent / authorization under the aforesaid Acts and Rules. It is recommended that the Hon'ble NGT may also look into the activities of the PCB, Assam with regard to the grant of CTE / NOC and CTO for all the projects of OIL, presently in operation, in the State of Assam.**

II. Compliance or otherwise of Orders of the Hon'ble Supreme Court

1. In 2006, vide an order dated 04.12.2006 in Goa Foundation vs. Union of India being W.P(C) No. 460/2004, the Hon'ble Supreme Court of India mandated that under the Environment (Protection) Act, 1986, States should declare eco-sensitive zones (ESZs) around the protected areas to keep a check on their fragmentation that may result from industrial development. Accordingly, mining and most polluting industries were prohibited in these zones. The Hon'ble Supreme Court further ordered that till the States do not identify such ESZs, all the projects that require environment clearance and are within 10 km of a protected area boundary, including mining, would be allowed only after getting an approval from the National Board of Wildlife (NBWL).

2. The Hon'ble Supreme Court, vide its Order dated 07.09.2017 in In Re T.N. Godavarman Vs. Union of India was pleased to relax the aforesaid prohibition in favour of OIL and granted conditional approval to OIL to undertake the present extraction of hydrocarbons from the proposed wells including the Well Baghjan-5. A copy of the Order dated 07.09.2017 is appended hereto as **Appendix-D**. As evident from the Order dated 07.09.2017, the relaxation granted by the Hon'ble Supreme Court necessitated compliance by OIL of the following conditions which included :

- (i) OIL will carry out a Bio-diversity Impact Assessment study through Assam State Biodiversity Board, for which budgetary offer have already been obtained on 12.05.2017.
- (ii) OIL will carry out subsidence study followed with taking mitigation measures, in order to ensure that there is no impact in the forest surface above the reservoir at height 3,900 to 4,000 mtr, due to extraction of hydrocarbon from the reservoirs.
- (iii) All mitigation measures will be in place in case of any eventuality causing oil spillage inside the Park such as – install Blow Out Preventer at well head and provide necessary valves in the production installations located outside the Park area. Standard Operating procedure (SOP), approved by the competent authority, pertaining to Oil Spillage, will be strictly adhered to.

- (iv) Undertake schedule test and inspection of the area periodically in order to assess any abnormality in the surface area above the reservoir inside the Park.
- (v) OIL will also ensure strict compliance of the conditions stipulated in EIA Notification 2006 for both inside the Park areas as well as the ESZ area of it.

3. **Having reviewed the documents placed before the Committee by both OIL and the Assam State Biodiversity Board, there appears to be a clear noncompliance *vis-à-vis* of conducting the Biodiversity Impact Assessment study as was mandated vide Clause 1 of the aforesaid Order passed by the Hon'ble Supreme Court. Neither OIL nor the Assam State Biodiversity Board have presented any Biodiversity Impact Assessment study that was undertaken after 07.09.2017. To a specific request for submission of all expert committee reports pertaining to DSNP and its biodiversity, the Assam State Biodiversity Board clarified that such Reports, if any, were available only with the Wildlife Wing of the Assam Forest Department, which administers the DSNP and the biological diversity contained therein under the Wildlife Protection Act, 1972. The statement of the Assam State Biodiversity Board, thus implies in clear terms that Assam State Biodiversity Board was not approached by OIL to carry out a Biodiversity Impact Assessment. In fact, OIL, in their reply to the Committee's query has stated to have engaged the Institute of Advanced Study in Science & Technology to prepare Biodiversity Impact Assessment study. It is not clarified by OIL whether they had informed the Hon'ble Supreme Court before making such deviations. In any case, as on date, there appears to be no such Biodiversity Impact Assessment study, either prepared by the Assam State Biodiversity Board or any other agency engaged by OIL, on record, till date.**

4. The Committee is presently reviewing whether OIL complied with the other conditions as mandated by the Hon'ble Supreme Court. Based on the reading of the documents placed before the Committee, a strong presumption arises that mitigation measures as directed by the Hon'ble Supreme Court for hazards such as spillage, oil blow out, fires were not in place at the time of the blowout or the fire at Well Baghjan -5. Additionally, the Committee is also reviewing the Good International Petroleum Industry Practices (GIPIP) guidelines codified by the Ministry of Petroleum and Natural

Gas, Government of India which indicate marked deviations in areas of exploration, development and production activities by OIL.

III. Issues pertaining to the Environment (Protection) Act, 1986

1. The Representations placed before the Committee by local stakeholders allege that OIL did not have the necessary Environmental clearance (hereinafter referred to as the EC) for Baghjan Petroleum Mining Lease (PML) when it became operational in 2003 under the then Environment Impact Assessment (EIA) Notification, 1994. Further, documents placed before the Committee by OIL indicate further discrepancies pertaining to issue of the mandatory EC required for offshore drilling projects. OIL has submitted three ECs pertaining to the Baghjan oilfield, the first of which is dated 01.11.2011. To a query raised by the Committee of whether OIL had received any EC from the Ministry of Environment, Forest and Climate Change prior to 01.11.2011, OIL has stated that the EC dated 01.11.2011 was the first obtained by OIL from the Ministry of Environment, Forest and Climate Change for which the application was submitted in 19.11.2007. It is a stated position by OIL that their operations in Well Baghjan-5 had first commenced on 20.11.2006. This leads to the *prima facie* conclusion that OIL had started the activities in Well Baghjan-5, 5 years prior to grant of EC by the Ministry of Environment, Forest and Climate Change, Government of India, which is mandatory. **The OIL thereby had contravened the provisions Environment (Protection) Act, 1986 and the Environment Impact Assessment (EIA) Notification, 2006 under which it is mandatory to obtain EC for any offshore drilling projects before commencement of activities on 20.11.2006.**

2. Given such contravention, the Committee is reviewing the various provisions and rules framed under the Environment (Protection) Act, 1986 for any further infraction by OIL against the safeguards prescribed under the aforesaid Act. Additionally, the Committee intends to verify whether the general and specific conditions as stipulated under the various ECs under the Environment (Protection) Act, 1986 and the EIA Notification 2006, have been complied with, particularly with respect to the projects pertaining to the Well Baghjan-5.

3. In this context, it is pertinent to note that the Ministry of Environment, Forest and Climate Change (MoEFCC) had brought out notifications in 1989, with the purpose of prohibition / restriction of operations of certain industries to protect ecologically sensitive Doon Valley. The notification introduced the concept of categorization of industries as 'Red', 'Orange' and 'Green' with the purpose of facilitating decisions related to location of these industries, which was gradually extended across the country. Subsequently, the categorisation was modified under Section 18(1)(b) of the Water Act and the Air Act for harmonizing of classification of Industrial Sector under red/orange/green/white categories by the Central Pollution Control Board vide Letter No.B-29012/ESS (CPA)2015-16 dated 07.03.2016. Notably, in both these categorizations, oil extraction related industries have consistently been classified as 'Red' which imply that no such industries shall normally be permitted to operate in the ecologically fragile areas/protected area.
4. In the aforesaid Letter dated 07.03.2016, Item 43 lists 'Oil and gas extraction including CBM (offshore & on-shore extraction through drilling wells)' under Table G-2: Final List of Red Category of Industrial Sectors. Similarly, in the Doon Valley Notification of 1989, petrochemical industry has been categorised as 'Red. Within the ambit of the 1989 notification, category "Red" projects were those which could not be included in the ecologically sensitive area across the country. The Re-Categorisation Exercise of 2016 also adopted the same criteria and provided that no "Red" category of industries would normally be permitted in the ecologically fragile area/protection area.
5. Curiously, the aforesaid Letter dated 07.03.2016 issued by the Central Pollution Control Board has been adopted by the State of Assam only in the year 2019 vide Notification No.WG/G-1521/18-19/27 dated 04.05.2019. Be that as it may, the subsequent declaration of eco-sensitive zone (ESZ) around the Dibru-Saikhowa National Park and the implications of the Notification of the new projects pertaining to the extension drilling and testing of hydrocarbons in the study area raise several questions which need to be examined by the Committee in further detail. The Committee is in the process of examining these inconsistencies with the instructions of the Central Pollution Control Board and the extent of such non-compliance.

6. During the site visit to Baghjan, the Committee also intends to verify if all the necessary conditions were complied with by OIL as was mandated by the SC NBWL while granting its approval for the new projects pertaining to Extension Drilling & Testing of hydrocarbons in Well Baghjan-5 including Well Baghjan-5 under the DSNP since 11.05.2020. The Committee is also reviewing OIL's HSE policies and guidelines to establish if they were compliant with the safeguards as provided under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016, E-Waste Management Rules, 2016, Oil Mines Regulation 1984, Oil Mines Regulation 2017 under the India Mines Act, 1952 and the GIPIP standards.

Chapter – V

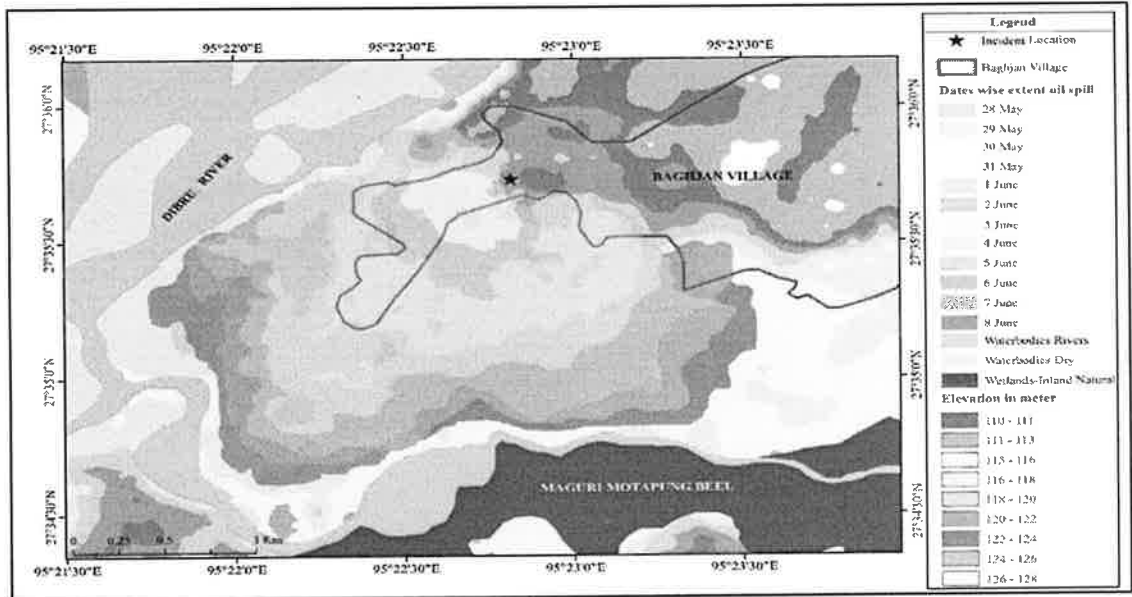
Assessment of Damages and Interim Measures

A. Assessment of Damages

1. Studies on oil blowout and explosion concur on the fact that the impact of a blowout and explosion depend on the size of the spill, the rate of the spill, the type of spillage and the location of the spill. Further, timing and location plays a significant harm to individual organisms and entire population. The Well Baghjan-5 blowout started on 27.05.2020 and continued for at least 14 days before the explosion on 09.06.2020. The fire continues to burn even after more than 50 days since the explosion on 09.06.2020. A disaster of this proportion, will reveal both acute and chronic effects, some of which may continue even for decades after the blowout and explosion. This section will discuss the damage that has been assessed through various impact assessment studies that have been conducted in the site area, till date. Inputs received from the local stakeholders form the basis of the following analysis. The section also draws significantly from the observations and suggestions gathered from its interactions with the scientific experts and institutions including the M.K. Yadava Committee, WII, Dr. Asad Rahmani, Professor B.C. Choudhury, Dr. Ritesh Kumar, Dr. Ranjan Kumar Das.

I. Extent of Affected Areas

1. The image provided below captures the day to day oil spillage coverage in Baghjan area. The image indicates the extent of spill that occurred in the surrounding area before the explosion on 09.06.2020 in the area. Ground reports from local stakeholders suggest that the incident has severely affected a radius of 6 kms from the Baghjan Oil Well No. 5. Further, areas within the radius of 6-10 kms have been moderately affected. Reports from local individuals indicate that the smell of gas has engulfed the entire landscape and was also felt from around 10 km away from the site of the explosion. Expert who have visited the site including Dr. Ranjan Kumar Das indicate that the condensate and the spill affected all forms of life within a 2km radius while the effects of the gases could be felt even at a distance of more than 9 kms. In his assessment, within the 2km radius, all the phytoplankton and zooplankton were directly affected while there were coatings of oil film on plant life, water bodies, agricultural fields, gardens and manmade structures.



Map-3: Showing projected gradual oil- spill in the surrounding areas of Baghjan based on satellite images, relationship of oil spill & ground elevation of the landscape and fire damage after the blast

Source: Aaranyak



Grassland burnt and turned brown due to oil spillage
Source: Report submitted by Imon Abedin



Fig.- 3 - Contamination of water(Oil flowing)

Source: Report submitted by Imon Abedin



Fig.- 2 - Baghjan Well. No. 5 releasing toxic chemicals

Source: Report submitted by Imon Abedin

2. The explosion on 09.06.2020 and the subsequent fire which broke out has led to immense damage to the local population and their homes, apart from small tea gardens which were completely burnt down. Reports indicate that the grasslands on the south-western side and the western side have been impacted by the fire and during the field survey conducted by the experts, it was observed that bird density and diversity within a 1km radius had reduced substantially.

3. The sound that has been emanating from the well since the explosion can be heard even from a distance of 12 kms from the site of the explosion. The reports unanimously report the extensive damage to the entire area around the explosion burning grasslands, tea gardens and houses. The report dated 05.07.2020 received from the Office of the District Administration prepared by the Circle Officer, Doomdooma indicate that a detailed assessment of the actual affected areas and the affected pattadars is ongoing and will be furnished to the Committee upon completion. The Committee intends to undertake a site visit early next week to independently verify the extent of the burnout area due to the explosion, the spillage area and the area affected due to the deposition of condensate and ash.

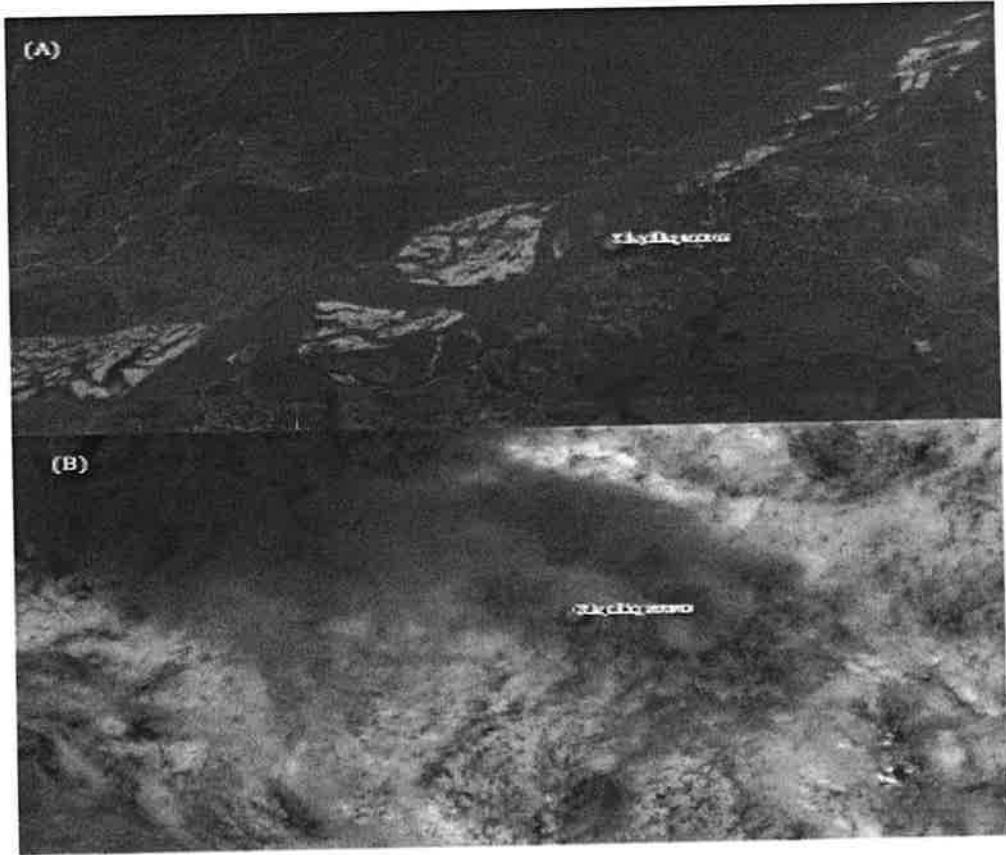
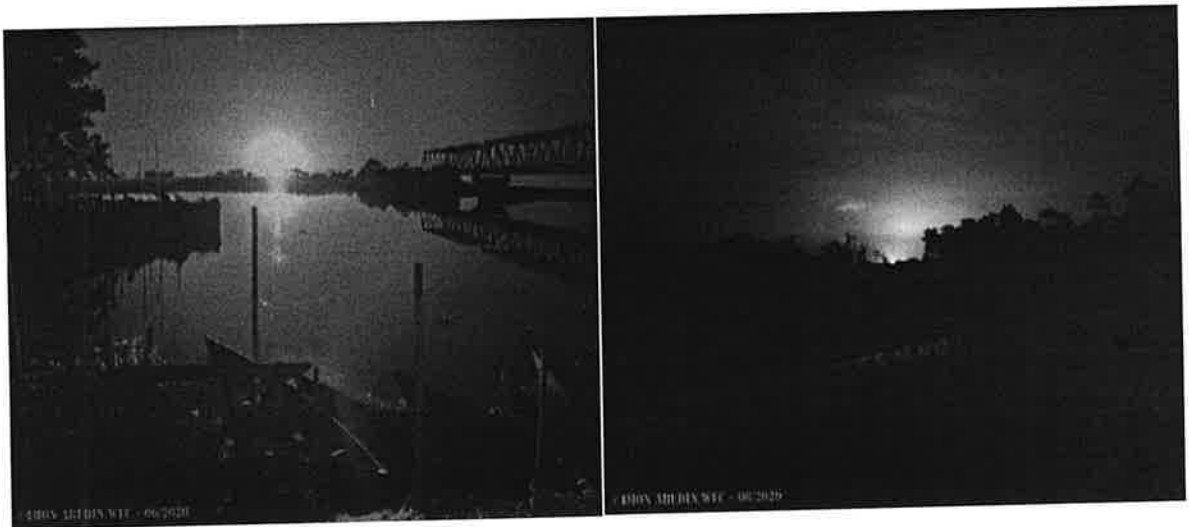


Figure 4: (A) Satellite image of the blow out area before oil spill and explosion as on May 10th, 2020. (B) Satellite image of the blow out area after explosion on June 10th, 2020, where the smoke emanating and permeating the landscape is clearly visible.

Source: Report submitted by WII



Source: Report submitted by Imon Abedin

II. Damages occurred due to the Incident

a. Impact on Environment

1. All the expert reports, opinion and local representations before us unanimously concur that there has been substantial adverse impact on environment which is of a long-term nature. Several reports, particularly the impact assessment report submitted by the WII provide detailed *prima-facie* assessment of the impact to the environment through key parameters such as air, water, soil, sound quality etc. The Committee places reliance on the Report of WII for a preliminary finding on assessment of damages due to the incident. Simultaneously, independent testing on all these parameters has also been requested from the CSIR-NEIST, Jorhat and Pollution Control Board, Assam. The CSIR-NEIST, Jorhat has informed the Committee that the report shall be completed within a time frame of 20 days after the flood water recedes. The results of these tests will inform the final findings of the Committee.

The findings from the reports available presently have been analysed briefly herein below :

(i) Air Quality

1. Several representations received from the local communities in and around the site of incident have revealed complaints of difficulty in breathing and the ambient air being laden within toxic and heavy fumes. Even scientific teams from institutions such as the WII, who have visited the site, have reported such experiences. To this end, some preliminary data of the presence of high level of pollutants in the air is available. The WII has measured the Nitrogen, Sulphur Dioxide, Carbon Monoxide and HCHO (formaldehyde) in the environment surrounding the site of incident. NO₂ has shown 16 % increase on May 27 which is the highest recorded in the data time window (1st May to 10th July). According to the study, SO₂ (Sulphur Dioxide) levels spiked on 27.05.2020 and the highest has been recorded on 09.06.2020, following which it subsided. HCHO (Formaldehyde) also showed a spike on 28.05.2020 and 09.06.2020, with the highest reading on 21.06.2020. The CO (Carbon Monoxide) levels do not show much changes before and after the blowout.

2. It has been widely reported in the representations available before us that several residents of villages close to the site of incident who have not been accommodated in the relief camps for various reasons are suffering from breathing difficulties. It can be conjectured that such a state of affairs is not desirable for the health conditions of several vulnerable population groups such as geriatric individuals, pregnant women, children etc who reside in the nearby villages.

(ii) Water

1. In several representations filed before the Committee, it has come to light that local residents, especially of villages located close to the site of incident have been suffering because of contamination of the ground water. It has been stated before the Committee, that tube-wells used by villagers are emanating foul smelling water which makes it unusable. Several villages which are predominantly dependent on fishing from the nearby water bodies, such as the Maguri-Motapung wetland have been deprived of their livelihood because of the condensate on the water surface which has caused widespread damage to the aquatic ecosystem and also contaminated the water.

2. The water quality post the blowout has also been examined by scientific teams. Some of the preliminary data from institutions such as the WII reveal that there has been large scale impact on the quality of water in the surrounding water bodies, thereby, as a corollary causing substantial damage to the aquatic ecosystem. The WII assessed the quality of water through essential physiological parameters such as pH, Dissolved Oxygen (DO), Total Dissolved Solids (TDS), Conductivity, Specific Conductance Temperature and Polycyclic Aromatic Hydrocarbons (PAHs) pollutants based on ground sampling of water, soil and tissue of dead animals.

3. The results indicate that the levels of Dissolved Oxygen in the Lohit, Dibru and Maguri-Motapung was lower than the minimum recorded value of Brahmaputra and barely above CPCB Class-A limits. The levels of Dissolved Oxygen had decreased from the day of blowout till the last date on 22.06.2020. In the opinion of the Institute, the Maguri-Motapung wetland is the worst affected with large scale death of aquatic fauna. The pollutants in water has also had a disastrous impact on the aquatic fauna. High mortality has been reported among fishes, insects, herpetofauna and insects including the decline of Gangetic River Dolphin Population in the area. A mortality

among the Gangetic Dolphin Population due to oil poisoning in the area has also been reported. It has been found that encounter rate of Gangetic River Dolphin in the area has decreased by 89% post of the oil blowout. While dolphin presence was recorded in Lohit and Dibru areas, no recording of Dolphin sound in Maguri-Motapung areas, which was the most impacted site.

4. The tests and evaluations carried out by the WII conclude that high levels of carcinogenic Polycyclic Aromatic Hydrocarbons (PAH) pollutants have been released into the ecosystem, and will remain in the system for a long time. The concentration of carcinogenic PAH was found to be significantly higher than other studies in India and other parts of the world. Concentration of PAH found in fishes collected from Maguri-Motapung wetland was found to be 10-100 fold higher than earlier reported concentration in India and other parts of the world. The impact of this will be long term as these pollutants will leach into the ground and contaminate ground water.

(iii) Soil

1. Representations from the surrounding areas reveal that local residents have suffered heavy damage to agricultural land, homestead land and also access to commons such as fishing in Maguri-Motapung wetland and associated water bodies. In fact, some local agriculturists have stated before the Committee that the damage to their land is irreversible. In their view, their lands, much of which have not been surveyed by the Revenue Department, Government of Assam; might not be cultivable for another 20 years.

2. The preliminary data received by the Committee corroborates the claim that there has been widespread damage to the soil. The impact assessment report of the WII states that high levels of carcinogenic Polycyclic Aromatic Hydrocarbons (PAH) pollutants which have been found in the ecosystem surrounding the site of incident will eventually percolate into the ground and even contaminate the ground water. In their view, the toxicity from these groups of pollutants is known to persist in the soil and aquatic system for a long time due to sustained release which will cause prolonged ill effects on all life forms. The PAHs in the soil and sediment samples used by the Institute ranged from 37.6 to 395.8 $\mu\text{g}/\text{Kg}$.

3. The soil analysis conducted by the Pollution Control Board, Assam on 12.06.2020 and 23.06.2020 in and around the site of incident have generally reported "Oil & Grease" above the permitted tolerance limits. In samples from the blowout site, heavy metals such as Lead and Copper have also been reported as above the permitted tolerance limits. The Committee has deemed it proper to call for updated and comprehensive toxicity tests from the Pollution Control Board, Assam. The results of the tests are expected shortly and will inform the final findings of the Committee.

(iv) Sound/Noise

1. The representations received from local communities have also stated that the constant noise emanating from the oil well has caused immense difficulty to residents in the vicinity. It has been stated before us that the noise pollution from the oil well has made it difficult to go about activities of day to day existence such as sleeping. It has caused immense difficulty for students whose education has been hampered and also senior citizens who have not been able to rest or sleep. The long-term health impacts of such a situation will have to be studied in greater detail.

2. However, preliminary data available before us demonstrate that the noise levels existing currently in the vicinity of the site of incident is well above the limits set by the World Health Organisation (WHO) and the Central Pollution Control Board (CPCB), which it makes it detrimental to both human and animal life. The assessment carried out by the WII at the site has arrived at the same finding. According to their study, the noise level in 12 km radius of 70db or above is higher than standard limits set by WHO and CPCB and is not suitable for both human and animal life. Exposure for a prolonged period may result in hearing loss and many other ailments apart from affecting most of the birds and mammal species. It has been stated by WII that the noise level of this magnitude will cause high levels of stress for humans who are in the vicinity and may become a threat to wildlife as well.

(v) Loss of Flora and Fauna

Since the expert team could not visit the affected site, this part of the report has been compiled from the reports submitted by WII, Aaranyak and Dr. Ranjan Kumar Das. Photographs of vegetation helped in identification of some of the plant species.

However, a detailed field study is needed to have a detailed technical report on the damage caused by the incident of gas blowout and fire to the biodiversity of the area.

(vi) Loss of Flora

1. The spread of gas and condensate from the Well Baghjan-5 since 27.05.2020 poses a threat to the biodiversity of the area that included Maguri-Motapung wetland, DSBR and the surrounding villages. Dr. Ranjan Kumar Das commented in his preliminary report that the condensate and related pollutants covered an area up to 2 kms radius from the blowout well. The vegetation under 2km radius comprised of tall grassland and aquatic vegetation of Maguri-Motapung wetland including part of the DSNP and Biosphere Reserve. Condensate created a layer over the grassland and wetland plant species that used as a habitat by critically endangered, endangered and rare birds, herpetofauna, butterflies and other wildlife. The water bodies are also source of rich diversity of phytoplankton in the area. The condensate layer and other pollutants on the plant species restricted the photosynthetic processes and resulted in injury and death of the species. The grassland within 2 km radius is generally dominated by *Arundo donox*, *Saccharum spontaneum*, *Saccharum ravaenae*, *Phragmites karka*. The severe impact of the pollutants from gas well could be seen on the grassland communities in Baghjan area and Maguri-Motapung Beel. Aaranyak identified a dried area (130 hectares) due to condensate (before 09.06.2020) covering current agricultural land (43.9 ha), gas well area (1.64 ha), betel nut gardens, small tea gardens, bamboo groves and home gardens (12.6 ha), grasslands (56.02 ha) and water spread areas (15.84 ha). The report of WII confirmed burnt out of the vegetation amounting to about 60-70 hectares around the blowout well that caught fire on 09.06.2020. The pollutants also spread over the surrounding forest vegetation that comprised of basically mixed deciduous in characters with some semi-evergreen elements. The entry of different hydrocarbon compounds in the ecosystem severely disturbed the aquatic animals specially fish diversity due to the adverse effects on micro flora specially the phytoplankton. As phytoplankton (producer) is the major component of the food web of the aquatic ecosystem, the bio-magnification of the toxic pollutants in different trophic levels need to be studied and monitored to assess the actual damage in the wetland area of Maguri-Motapung wetland and DSBR.

(vii) **Loss of Fauna**

1. The spread of gas and condensate from 27.05.2020 to 09.06.2020 before the fire broke out, caused severe damage to the air, water, soil and surrounding vegetation and settlement area including agricultural fields. It caused death and injury of different groups of wild and domestic animals in the area. The noise pollution also caused significant decrease of diversity of wildlife from the area.
2. According to the reports of WII, Aaranyak and Dr. Ranjan Kumar Das, a dead Gangetic Dolphin (National aquatic animals of India) was found dead from Maguri-Motapung wetland after the blowout incident. The Post-Mortem Report conducted by WII suggested the probable cause of death of the dolphin could be the inhalation or ingestion of toxic substance leading to hypoxia.
3. Most of the breeding endemic Red Data Book grassland birds namely Swamp Francolin, Marsh Babbler, Jerdon's Babbler, Black-breasted Parrotbill and Swamp Prinia abandoned their nest without hatching or left their chicks to die after the incident. Dr. Ranjan Kumar Das also observed very less bird density and diversity within radius of 1km from the well after the incident.
4. Some of the observations of damages on wild fauna and its habitats made by the Report of the WII after the Baghjan blowout incident are summarised in the following points –
 - i. The observed levels of PAHs (Polycyclic aromatic hydrocarbons) after the incident are reported to have severe impacts on fishes, plants, microbes, birds, reptiles, amphibians and mammals.
 - ii. The total PAHs concentration reported in fish samples appears to be 10 - 100 folds higher than the earlier reported concentration in India. The impact is significant and will have long term effect, as many of these pollutants will leach into the ground and contaminate ground water.
 - iii. Maguri-Motapung wetland was severely damaged and polluted with respect to level of dissolved oxygen (DO), and total petroleum hydrocarbons. Fish richness declines by 71% and abundance by 81% between poor and good DO sites. It was observed that fishes having visible symptoms on body due to oil toxicity, like loss of scales, decolouration, bleeding and excess mucous secretion. Large numbers of species

have shown signs of oil impact. Among the affected fishes, some like – *Cirrhinus reba*, *Banagana dero*, *Labeo bata*, *Labeo calbasu*, *Sperata aor*, *Sperata seengala*, *Channa marulius*, *Channa punctatus*, and *Eutropiichthys vacha* have high economic value in market and some other fishes like – *Puntius sophore*, *Puntius chola*, *Pethia gelius*, *Salmophasia bacaila*, *Baralius barna*, *Mystus vittatus*, *Xenetodon cancila*, *Anabus testudineus*, and *Parambassis ranga* are ornamentally important fishes. The abundance of these species was found to be significantly less in Dibru River and Maguri-Motapung wetland, likely due to the mortality and avoidance of high toxic areas due to oil spill. About 30 carcasses of fish were recovered in water bodies around the blowout site. Communications with locals reveal that there were many more dead fish earlier after the gas well blowout and they have either washed out due to flood or fished out.

iv. The predicted noise level from oil blowout point to 12 kms away ranges from 113 to 70db. This level of noise will adversely impact mammals, birds and insects, from disorientation to health issues.

v. The encounter rate of Ganges river dolphin was 4.5/10 kms, which was reduced to 1.5/10 kms in May and by June it was 0.48/kms indicating 89% decline in use of this area between February and June.

vi. The decline in bird richness is evident in grassland (59%) and wetland (85%) habitats.

vii. Species richness and abundance of butterflies increases with distance from well blowout site indicating impact of oil spill. Presences of oil film on wings of green marsh hawk and ditch jewel dragonfly and a carcass of a scarlet skimmer species with oil film on wings were noticed.

viii. There was a direct impacts of explosion burn down at least in 500 meter, and impacts of oil spill seems to be the likely cause for reduced encounter of herpetofaunal species. Live herpetofauna was recorded from 500m up to 6 km from the oil well explosion site and recovered carcasses at 400m and 6 km.

5. Therefore, there is an urgent need of a long term study to understand the long-term impacts of this uncontrolled blowout and gas-condensate spill on the ecology and environment of Maguri-Motapung wetland and DSNP as well as on the health and socioeconomic conditions and livelihood of local communities (depended on biodiversity of the area) around the affected areas.

(viii) Seismic activities

1. Assam is well known as a seismic zone, having recorded several major earthquakes in its history. Some of the representations before us, especially from local communities, highlight the fact that oil extraction and drilling in areas such as Baghjan should account for this factor. Even the impact assessment report from WII placed before the Committee, corroborates the validity of the claim. It has been stated that the Northeast region being one of the most active seismic zones in the world and Assam having recorded 586 earthquakes from 1970 to 08.07.2020; the site remains especially vulnerable to seismic activity.

2. WII submits that the seismic activity coupled with dynamic nature of the river systems in the area, which have changed course after waves of flooding, makes the landscape extremely fragile in the site of incident. Changes to geomorphology in the area can have damaging consequences in their opinion. It has been suggested, therefore, that oil drilling, laying pipelines etc. be considered with these interrelated factors in mind.

3. It has also been stated in the representations from the local communities that tremors emanating from the blowout site has caused heavy damage to their homes and local infrastructure. Several houses in these villages have reported cracked walls and floors and therefore, they are due to get compensation from OIL and the Government of Assam.

b. Impact on the Eco-Sensitive Zone, Dibru-Saikhowa National Park and the Maguri-Motapung wetland

1. Reports received from all scientific experts and institutions unanimously concur on the extensive damage that has been caused to the ecosystem around Well Baghjan-5 including the DSNP, the Eco-Sensitive Zone and the Maguri-Motapung wetland. The DSNP is inundated with water and therefore site visits by experts have been limited to the Maguri-Motapung wetland. This section significantly draws from the reports received by the Committee, specifically from the local stakeholders and experts / institutions including, Shri Niranta Gohain, Dr. Ranjan Kumar Das, Prof. B.C. Choudhury, Dr. Asad Rahmani, Dr. Ritesh Kumar, observations made by the Expert Committee headed by Shri M.Y. Yadava, constituted by Government of Assam, WII.



Figure 4.1: Satellite image before oil well blow out, the impact area is in red square.

Source: Report of the WII submitted to the Commission



Figure 4.2: Satellite image after oil well blow out, the impact area is in red square.

Source: report of the WII submitted to the Committee



Fig- 13 – Aerial image shows the recent oil leakage from other source in the area (Photo Date- 27th June,2020)

Source: Report of Imon Abedin submitted to the Committee

2. The impact assessment report dated 15.07.2020 by WII provides a detailed analysis of the extent of damage in the aftermath of the blowout and spill. The results indicate that large scale damage has been caused to the biodiversity in the area. The tests and evaluations carried out by the WII conclude that high levels of carcinogenic Polycyclic Aromatic Hydrocarbons (PAH) pollutants have been released into the ecosystem and will remain in the system for a long time. The concentration of carcinogenic PAH was found to be significantly higher than other studies in India and other parts of the world. Concentration of PAH found in fishes collected from Maguri-Motapung wetland was found to be 10-100-fold higher than earlier reported concentration in India and other parts of the world. The impact of this will be long term as these pollutants will leach into the ground and contaminate ground water.
3. High mortality has been reported among fishes, insects, herpetofauna and insects including the decline of Gangetic River Dolphin Population in the area. A mortality among the Gangetic Dolphin Population due to oil poisoning in the area has also been reported. It has been found that encounter rate of Gangetic River Dolphin in the area has decreased by 89% post of the oil blowout. While Dolphin presence was recorded in Lohit and Dibru areas, no recording of Dolphin sound in Maguri-Motapung areas, which was the most impacted site. It has been found that bird species richness increases with the increase in distance from oil spill site. While the overall richness and abundance of fishes decline with decrease in dissolved oxygen at different sites, which in turn was a result of the oil spill. There was a similar impact on insect populations which were found in much less number closer to the impact site.
4. The test results carried out by WII indicate that the levels of Dissolved Oxygen in the Lohit, Dibru and Maguri-Motapung was lower than the minimum recorded value of Brahmaputra and barely above CPCB class A limits. The levels of Dissolved Oxygen had decreased from the day of blowout till the last date on 22.06.2020. In the opinion of WII, the Maguri-Motapung Beel is the worst affected with large scale death of aquatic fauna.
5. Dr. Ranjan Kumar Das is of the opinion that the first phase of the damage happened during the period from 27.05.2020 to 08.06.2020 when the toxic gases with condensate were being blown out. The grasslands have been severely affected and most

of the grassland bird species enlisted in the IUCN Red Data Book who were breeding have abandoned their nests without hatching. The table included by Dr. Ranjan Kumar Das is reproduced herein below :

Table 2: List of the breeding grassland birds of Maguri-Motapung grassland and their IUCN status

Species	Scientific Name	Status in IUCN Red Data Book
Swamp Francolin	<i>Francolinus gularis</i>	Vulnerable
Marsh Babbler	<i>Pellorneum palustre</i>	Vulnerable
Jerdon's Babbler	<i>Chrysomma altirostre</i>	Vulnerable
Black-breasted Parrotbill	<i>Paradoxornis flavirostris</i>	Vulnerable
Swamp Prinia	<i>Prinis cinerascens</i>	Near Threatened

It was noted that not a single threatened bird in the IUCN Red Data Book were seen as most of their habitats have been badly affected by the fire. As on 14.07.2020, even after three waves of floods, oil sleek and condensate could be observed in the grassland habitats.

6. The Expert Committee led by Shri M.K. Yadava constituted by the Government of Assam, and other expert agencies such as the Bombay History Society are involved in carrying out surveys of the avian and aquatic fauna that have been impacted. Local experts on birds, fishes, butterflies etc. have been engaged in carrying out surveys under the Divisional Forest Officer, Tinsukia Wildlife Division for all parts of the DSNP and the Dibru/Dangori River ecosystems. The coordination of all the surveys in the Maguri-Motapung ecosystems and surrounding areas are being done by the Divisional Forest Officer, Dibrugarh Division. Wildlife specimens have been collected by the respective Divisional Forest Officers and the PCB, Assam. The samples have been sent to various institutions such as Institute of Advanced Studies in Science and Technology, Guwahati, Assam Agricultural University, Assam etc. Maps are also being prepared by the GIS Team from AMTRON is working on the preparation of maps in various layers. However, it has been stated that the results from the tests, surveys etc are delayed due to the floods and the lockdown due to COVID 19. The Committee awaits the results of these surveys and intends to undertake a detailed

review of the ground situation during its site visit. The Committee has also requested the PCB, Assam to conduct an independent toxicity test of the Maguri-Motapung wetland and the same is awaited.

7. The reports of the local stakeholders and the experts also include recommendations on remedial measures. Such measures include an ecological restoration plan, comprehensive ecological monitoring, expansion of the eco sensitive zone, ban on further oil drilling in and around the Maguri-Motapung wetland, which are presently under deliberation by the Committee. The Committee will submit its suggestions in its next Report along with the findings of the site visit and the results of the tests.

8. **The Committee is, however, of the unanimous view, that it is necessary to set up/induct a multidisciplinary team comprising of community members along with experts on wetland ecology, hydrology, fisheries, water birds' specialists and others who will report to the Committee and will be responsible to formulate a restoration plan for the Maguri-Motapung wetland and also to ascertain the extent of damages and the compensation to be fixed for that purpose. The Committee, in its subsequent report shall make necessary recommendations for payment of compensation by the Pollutor for restoration of the damages caused to the eco-system.**

III. Socioeconomic Loss

a. *Affected Households and Population*

1. Report dated 05.07.2020 received from the Office of the District Administration prepared by the Circle Officer, Doomdooma indicate that a detailed assessment of the actual affected areas and the affected pattadars is ongoing in Baghjan Gaon, Natun Rongagorha Gaon and adjoining areas, which will be shared with the Committee immediately upon completion. Till date, the Office of the District Administration has furnished the recorded Pattadars including Patta number, Dag numbers under 500 meter radius and under 501-1000 meter radius. The details are appended hereto as **Appendix-E**. Considering the proportion and intensity of the oil blow out and the explosion, the Committee has requested the DC, Tinsukia to undertake a detailed assessment of the villages, households and individuals,

specifically those who have been severely, moderately and marginally affected, the extent of damage to immovable property, the loss of livestock, damage to standing crops and horticulture, damages to fisheries etc. The report is awaited.

2. As per the reports of the Gaonburah dated 14.07.2020 furnished by the Office of the District Administration, till date, 46 households within the vicinity of 200-250 meters, including 11 completely burned households, have been severely impacted. It has been indicated that due to the flood situation in the area and the fire, which was still burning then, it was difficult to conduct the survey and has accordingly sought more time to complete the task. A Copy of the report of the circle officer, Doomdooma as furnished by the DC, Tinsukia is appended hereto as **Appendix-F**.

3. Ground reports from local stakeholders suggest that the incident has severely affected a radius of 6 kms from the Baghjan Oil Well No.5. Further, areas within the radius of 6-10 kms have been moderately affected. Reports from local individuals indicate that the smell of oil has engulfed the entire landscape and was also felt from around 10 km away from the site of the explosion. Local stakeholders have described dense coatings of oil film on plant life, water bodies, agricultural fields, gardens and manmade structures. They have further suggested that cultivation within the severely impacted zone within the radius of 6 kms won't possible for at least another 20 years, causing irreparable loss to the community. Second- order impacts such as damage to homes due to tremors from the blowout, impact on children's education etc. has also been widely reported due to the sound and earth tremors arising from the blowout. Many local residents also report heavy damage to homes from the earth tremors generated by the oil well blowout. One of the interviews mentioned in the representation submitted by Sri Niranta Gohain claim that the oil well blowout has damaged the area culturally and its heritage had been completely dismantled.

4. It is pertinent to note here that immediately in the aftermath of the Gas Blowout at Well Baghjan-5, a total of 4 relief camps were set up wherein 1610 families has been accommodated with provisions for health, sanitation and drinking water facilities in association with OIL. On 09.06.2020, after the explosion, villagers from within a radius of 2-3 km from the site of the explosion took shelter in school building beyond a distance of 3 kms designated as relief camps. Till date, there are a total number of 12 relief camps, as informed by DC, Tinsukia, which have been set up for

families affected by the blowout and explosion. Further, due to the increasing tremor in the houses, many families from Natun Rongaorha Gaon, which is across the Maguri-Motapung wetland, in the western site of the Well Baghjan-5 have taken shelter in the relief camp set up at Guijan High School.

b. Health hazard caused to the public

1. The hazardous releases have left the community in a precarious position. Studies report that the sound pollution in the area is excessive and is detrimental to both human and animal life. The noise level in 12 km radius of 70db or above is higher than standard limits set by WHO and CPCB and is not suitable for both human and animal life. In prolonged period, it may result in hearing loss and many other ailments. Representations received from local stakeholders and affected communities indicate that the drinking water available from tube-wells have become undrinkable because of an odour after the blowout apart from new forms of disease creeping up among the population.

2. The representation also enclosed short transcripts of 83 interviews with residents of 11 villages in the vicinity of the site of incident. All of these interviewees have reported health related impacts of the blowout. Of the 83 interviewees, 44 interviewees reported both health related impacts. All the interviewees unanimously mention some form of adverse health impact such as breathing difficulty, headache from the incessant sound from the oil well, damage to cultivation, polluted drinking water etc. The reports of the local stakeholders on health impacts are corroborated with the medical records, as furnished by OIL, of individuals presently under treatment in the hospitals. **It is recommended that an immediate medical assessment be undertaken by a team of medical experts to ascertain the acute and chronic effects on the affected population.**

3. In this context, it is pertinent to mention that representation from all local stakeholders' express concern over the living and hygiene conditions in the overcrowded relief camps. As per the information furnished by OIL, 1961 families with 9107 persons are staying at 10 relief camps. This, by itself, indicates that social distancing norms and sanitation facilities are under severe constrain as alleged by the local representatives. Such vulnerability faced by the villagers expose them a higher risk of contracting

infectious and communicable diseases and particularly susceptible to COVID 19. Although, till date, no COVID positive tests have been reported from the existing relief camps, it is specifically recommended that regular screening for COVID is conducted and as and when necessary. It is further recommended that adequate number of relief camps with adequate health and sanitation facilities be set up by the Office of the District Administration and OIL, in conformity with the COVID-19 guidelines issued by WHO, Government of India and Government of Assam. Furthermore, it is specifically recommended that all individuals presently being accommodated in the relief camps be provided with immediate health safeguards, including insurance cover for COVID 19.

IV. Remedial Measures by OIL

Post remedial efforts undertaken by OIL, as per the information made available to the Committee is stated to *inter-alia* include the following :

- i. OIL has engaged M/s ERM India Pvt. Ltd., a leading global service provider of environmental, health, safety, risk consulting services, to conduct an Impact Assessment to review the site surroundings and the affected areas around Well Baghjan-5 in order to identify the environmental & ecological impacts and community health issues and recommend remedial measures. The study includes inter-alia an assessment of the air quality, contamination of surface, ground water and soil, impact to biodiversity.
- ii. OIL has engaged the Energy Research Institute (TERI) with the objective to recuperate the original properties of soil and water that has been contaminated by the spillage and suggest bio remedial measures. This would also enclose an assessment of the impact/contamination to the surface water, ground water and soil in the affected areas.
- iii. Competent authorities from Assam Agriculture University have been engaged to assess the damage to crops, trees, plants including paddy, tea, fruits and vegetables in the area affected in the aftermath of the Blowout.
- iv. CSIR NEIST has been requested to assess the vibrations and tremors that are being experienced in and around the vicinity of the Well Baghjan-5.

- v. An amount of Rupees Nine Crores has been deposited with the Office of the District Administration towards payment of one time compensation to the families residing in the relief camps.
- vi. 10 relief camps are presently being managed together by OIL and the Office of the District Administration. 1961 families are being accommodated in these relief camps. OIL has designated one officer per camp to oversee the management of the camps. Regular visits with representatives of the Office of the District Administration on a daily basis. Further, a team of two doctors and five para medicos are stationed at oil installations in Baghjan with medicine and ambulances. Medical camps are being regularly conducted at the relief camps by OIL doctors, local hospitals and ARMY doctors. Medical cases reporting high fever with symptoms are being referred to the AMCH, Dibrugarh for COVID tests. So far, no cases of COVID 19 have been reported from the relief camps. A net expenditure of Rupees Eighteen Crores and Ninety two Lacs towards providing relief and rehabilitation to the affected areas have been spent, till date.

B. Assessment of compensation for the survivors

1. From the aforesaid discussions, it is prima facie concluded that the well Baghjan-5 blowout and subsequent explosion has led to extensive damage to both the publicly owned resources including the Maguri-Motapung wetland, DSNP, the Eco-Sensitive Zone including the water bodies, air, wildlife and the natural resources surrounding it as well as caused irreparable physical harm and damage to privately owned property of the survivors in the affected villages. As pointed out by the local representatives and the Office of the District Administration, the affected families and individuals are in immediate need of funds to address the consequences of the hazardous spills and releases. According to the report of the Gaonburah, while the severely affected families as assessed within the immediate vicinity of the explosion site have suffered grave physical harm to persons and property, others in villages such as Natun Rongapara Gaon have incurred some economic harm and health hazards. The plight of the affected families and individuals have been compounded due to the ongoing flood situation and the spike in COVID 19 cases that have been witnessed in the last few days.

2. The Committee has been apprised by the DC, Tinsukia that based on consultation held on 05.06.2020 with select villagers of Baghjan Gaon, Baghjan Gaon Milanjyoti Yuba Sangha, SP, Tinsukia and representatives of OIL that a one-time compensation amounting to Rs. 30000 has been agreed to be paid by OIL to the affected families as an immediate relief as per the list available with the Circle Officer, Doomdooma. On the basis of the report of the Circle Officer, Doomdooma, the process of disbursing the one-time compensation has been initiated and amount has been credited to the bank accounts of approximately 1049 families. It was further agreed during the consultation that affected families whose names have been left out of the list would be included after due verification. In this context, it be mentioned that the local representatives have forwarded a list of excluded affected families and individuals to the Committee, which has been forwarded to the DC, Tinsukia with a direction for inclusion after due verification by the concerned circle officers. A list of all the affected persons verified by the circle officer, Doomdooma is appended hereto as **Appendix-G**.

3. Further, the Committee has been informed by the DC, Tinsukia vide his letter dated 17.07.2020 that 11 residential houses were found to have been burnt completely after a detailed assessment undertaken by the Office of the District Administration along with the Public Works Department. At a tripartite meeting between Baghjan Gaon Milonjyoti Yuba Sangha, OIL and the District Administration, an amount of Rs. 20 Lacs was proposed by OIL and the District Administration as advance to be adjusted in due course against the total amount payable for the damage sustained by the eleven severely affected families. However, at the objection raised by the Baghjan Gaon Milonjyoti Yuba Sangha, to the suggestion of the amount being offered as 'advance', it was agreed that the amount of Rs.20 Lacs would be paid as compensation and the question of 'adjustment against the advance' would be decided by the competent authority / Hon'ble NGT. The letter further states that the process of disbursing the amount of Rs. 20 lacs will be initiated shortly.

4. Additionally, a one-time compensation of Rs.25000/- is being awarded to each of the affected families and individuals who had shifted to the relief camps in the wake of the explosion in well Baghjan-5 on 09.06.2020. 709 numbers of such affected families have been identified till date by the Circle Officer, Doomdooma and the money is in the

process of being disbursed by the Office of the District Administration. A copy of the list of the 709 affected families and individuals have been appended to as **Appendix-H**.

5. Further, it is pertinent to note that, quite apart from the aforesaid measures, the survivors of the blowout and the explosion are also entitled to claim damages under the Public Liability Insurance Act, 1991, Disaster Management Act, 2005 and the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016. In fact, the Public Liability Insurance, 1991 vide Section 3 provides for a 'no fault' liability which mandates the 'owner' to provide relief to any person who has sustained any injury or damage to any property from an accident. Further, Section 4 of the said Act casts a statutory duty on the 'owner', in this case OIL, to take out insurance policies before handling any hazardous substance. To a specific query raised by the Committee, OIL has furnished details of two such policies. However, from the facts made available to the Committee, it is impossible to ascertain when these policies were made, if the policies concerned Well Baghjan-5 and the time period/duration for which it was made. The Committee is presently reviewing the documents to ascertain any possible violations under the said Act. However, prima facie the Committee is of the view that the provisions of Section 4 of the Public Liability Insurance Act, 1991 has been violated.

6. Based on the preliminary assessment, till date, the Committee is of the unanimous opinion that the Well Baghjan-5 blowout and explosion was preventable. Further, the hazardous release has impacted lives in a variety of ways and effected lives differently. Further, the Committee is of the view that in furthering the cause of environmental justice, people whose lives have been impacted must be meaningfully involved to participate in decisions that affect their lives, environment and health. In pursuing this approach, the Committee has therefore sought the assistance and called for representations from the local communities including representatives such as Baghjan Gaon Milonjyoti Yuba Sangha. The Committee has received some response till date, however, await the detailed responses including representations from Baghjan Gaon Milonjyoti Yuba Sangha. The Committee also intends to meet the affected families and individuals, visit the relief camps during its site visit to ensure that compensation measures commensurate with the principles of environmental, social and distributive justice. Having said that, the Committee is however unanimous in its view that there

exist enough grounds to consider the question of interim compensation for the affected families and villagers. Be it stated that the above measures are being recommended only as interim relief and not to be construed as the final compensation which will be assessed subsequently and will include all remedial costs.

7. The expert reports and representations of local stakeholders indicate prima facie the disproportionate impact of the Well Baghjan-5 blowout and explosion on the families and villages within the vicinity of the disaster site and/or the neighboring areas. Therefore, in order to facilitate procedural, distributive, social justice, it is necessary to enlarge the class of survivors who are entitled to compensation. The Committee, therefore, proposes the formulation of three categories of affected families to assess the question of interim compensation namely –

- i) Those whose houses have been completely gutted by the fire thereby causing grave injury to life and health, loss of livelihood, cultivable land, livestock, damage to standing crops and horticulture, fisheries etc.
- ii) Those whose houses have been severely damaged thereby causing grave injury to life and health, loss of livelihood, cultivable land, livestock, damage to standing crops and horticulture, fisheries etc.
- iii) Those whose houses have been moderately/partially damaged or whose standing crops and horticulture have been partially damaged thereby causing injury to life and health, loss of livelihood, cultivable land, livestock, damaged to fisheries etc.
- iv) The scale of interim compensation is as follows :

Category (i) – Rs.25 Lacs

Category (ii) – Rs.10 Lacs

Category (iii) – Rs.2.5 Lacs

The Committee while making the recommendations for interim measures have borne in mind the health hazards as well as the possible effect caused due to the noise, air and water pollution. The Committee is of the view that the aforesaid classification must be made by the Office of the District Administration expeditiously and in consultation with the concerned circle officers, the Gaonburahs and the community representatives of the affected villages.

8. Based on the above discussion, the Committee recommends the following :

- i) An initial amount of Rs.25 Lacs will be released immediately to all the affected under category (i) whose information is already available with the Office of the District Administration. For the affected families under category, (ii) the amount of 10 lacs will be released immediately within an outer limit of 15 days, based on the information already available with the Office of the District Administration. The compensation amount, if any already paid, shall be deducted from the aforesaid amount of interim compensation.
- ii) The Office of the District Administration will compile a list of all those in Category (iii), who have been moderately / partially impacted, in consultation with the revenue officers, PWD, concerned circle officer, the Gaonburahs and community representatives of the affected villages. The disbursement of the amount will be completed expeditiously within an outer limit of 45 days from the passing of the order by the Hon'ble NGT for interim compensation.
- iii) The affected families, particularly under category (i) and (ii), whose names have been left out of the list would be entitled to the said amount after due verification within 7 days from the passing of the order by the Hon'ble NGT for interim compensation and the same will be disbursed within 15 days from the date of completion of the verification.
- iv) The interim compensation will be paid by OIL and from the funds which have already been made available to the Office of the District Administration. The balance amount, if any, will be made available immediately by OIL and as and when asked by the Office of the District Administration.
- v) One-time compensation amounting to Rs.30,000/- that has been agreed to be paid by OIL to the affected families, who had moved to the relief camps due to Well Baghjan-5 blowout on 27.05.2020, as an immediate relief, will be disbursed immediately as per the list prepared by the circle officer, Doomdooma and available with the Office of the District Administration and not later than 7 days from the passing of the order by the Hon'ble NGT for interim compensation. The affected families whose names have been left out of the list would be entitled to the

said amount after due verification and the same will be disbursed within 15 days from the passing of the order by the Hon'ble NGT for interim compensation.

vi) One-time compensation of Rs.25,000/- will be disbursed to each of the affected families and individuals who had shifted to the relief camps in the wake of the explosion in Well Baghjan-5 on 09.06.2020 as an immediate relief as per the list prepared by the Circle officer, Doomdooma and available with the Office of the District Administration and not later than 7 days from the passing of the order by the Hon'ble NGT for interim compensation. The affected families whose names have been left out of the list would be entitled to the said amount after due verification and the same will be disbursed within 15 days from the passing of the order by the Hon'ble NGT for interim compensation.

vii) The interim compensation as well as the one time compensation, as stated above, will be credited directly to the bank accounts of the affected families and individuals by the Office of the District Administration. The said interim compensation is non recoverable and will be adjusted against the final compensation due to the affected families and individuals.

viii) An immediate health insurance policy including COVID 19 will be made available by OIL to all affected individuals and families by the Well Baghjan-5 blowout and explosion and who are presently taking shelter in the relief camps within 7 days from the passing of the order by the Hon'ble NGT for interim compensation.

Chapter – VI
Conclusions

Based on the preliminary assessment, the Committee has arrived the following preliminary findings, which are subject to further consideration by the Committee. In the interim, the Committee is also of the unanimous view that the well Baghjan-5 blowout and subsequent explosion has led to extensive damage to both the publicly owned resources including the Maguri-Motapung wetland, DSNP, the eco sensitive zone including the water bodies, air, wildlife and the natural resources surrounding it. Additionally, it has caused irreparable physical harm and damage to privately owned property of the survivors in the affected villages. The Committee therefore concludes the preliminary report with suggested interim measure including compensation for the affected families and individuals.

A. Preliminary Inferences

- I. The probable reasons of Well Baghjan-5 blowout and explosion are as under:
 - a. There was deficiency in understanding of the gravity of a critical operation like removal of BOP without having a confirmed and tested secondary safety barrier.
 - b. There was deficiency in proper planning of critical operations. There was a clear mismatch between planning and its execution at site and deviations from the Standard Operating Procedure.
 - c. There were serious deficiencies of proper level of supervision of critical operation at the well site both from the Contractor as well as from OIL.
- II. OIL did not have the mandatory Consent to Establish and Consent to Operate both under the Section 25 & 26 of the Water (Prevention & Control of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act and the Rules framed thereunder, when it first started its drilling operations in Well Baghjan-5 in 2006.
- III. On the day of the blowout of Well Baghjan-5 i.e. 27.05.2020 and subsequent explosion on 09.06.2020, OIL did not have the mandatory Consent to Establish and Consent to Operate both under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act and the Rules framed thereunder and/or the authorization Rule 6 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016.

IV. OIL, till date, does not have the required Consent to Establish and/or Consent to Operate to either carry out drilling and testing of hydrocarbons in Well Baghjan-5 under the DSNP Area, except for the years 2008-09, 2012-13, 2018-19, under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act, 1974, under Section 21 of the Air (Prevention & Control of Pollution) Act and the Rules framed thereunder and/or the authorization required Rule 6 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 which is in clear violation of the conditions stipulated in the Environmental Clearance dated 11.05.2020.

B. Preliminary Interim Measures

I. Immediate Preventive Measures to Avoid Similar Blowout and Explosions

- (i) It is pertinent to note that the handling of Gas wells is different than Oil wells. Therefore, it is necessary to have different SOP for Gas wells.
- (ii) Isolation of any Hydrocarbon bearing Zone by a secondary barrier is critical and ought to be planned carefully. Such well situation cannot be relied upon only on Hydrostatic Head of well Fluid. There ought to be proper secondary safety barrier, which are tested both positively and negatively to check its integrity before attending any critical operation in the well like nipple down of BOP.
- (iii) Placement of secondary safety barrier must be placed as near to the perforated zone and should not be placed anywhere in the well.
- (iv) Placement of Cement Plug is to be always done in the vertical portion of Casing. If required to place Cement Plug in a deviated well, either a perforated Tubing/ Drill pipe shoe is to be used and the string ought to be rotated during placement of cement slurry by using swivel joint or use the swivel joint with Kelly of the Rig. After balancing the Plug, the string needs to be pulled out slowly and while breaking the joints, Rotary is to be used to break the joint which will help cement slurry to spill all around and also to fall smoothly from inside string.
- (v) It is important to design Cement Slurry with water loss additive to control water loss from cement slurry to bare minimum during setting of cement. Retarder may also be added to get the desired thickening time. Compressive Strength of the designed slurry are to be tested at 12 hours, 24 hours and 36 hours.

(vi) Before doing any critical operation in well, a comprehensive contingency Plan must be made available to face any eventuality. In this particular well due to not having any such Plan.

II. Restoration Plan for Maguri-Motapung Wetland

1. The Committee is of the unanimous view, that it is necessary to set up/induct a multidisciplinary team comprising of community members along with experts on wetland ecology, hydrology, fisheries, water birds' specialists and others who will report to the Committee and will be responsible to formulate a restoration plan for the Maguri-Motapung wetland and also to ascertain the extent of damages and the compensation to be fixed for that purpose. The Committee, in its subsequent report shall make necessary recommendations for payment of compensation by the Pollutor for restoration of the damages caused to the eco-system.

III. Health Safeguards in Relief Camps

1. It is specifically recommended that regular screening for COVID is conducted and as and when necessary. It is further recommended that adequate number of relief camps with adequate health and sanitation facilities be set up by the Office of the District Administration together with OIL, in conformity with the COVID-19 guidelines issued by the WHO, Government of India and Government of Assam. Furthermore, it is specifically recommended that all individuals presently being accommodated in the relief camps be provided with immediate health safeguards, including insurance cover for COVID 19.

IV. Interim Compensation to the affected families

1. The Committee, proposes the formulation of three categories of affected families to assess the question of interim compensation namely ;

- i) Those whose houses have been completely gutted by the fire thereby causing grave injury to life and health, loss of livelihood, cultivable land, livestock, damage to standing crops and horticulture, fisheries etc.
- ii) Those whose houses have been severely damaged thereby causing grave injury to life and health, loss of livelihood, cultivable land, livestock, damage to standing crops and horticulture, fisheries etc.

iii) Those whose houses have been moderately/partially damaged or whose standing crops and horticulture have been partially damaged thereby causing injury to life and health, loss of livelihood, cultivable land, livestock, damaged to fisheries etc.

iv) The scale of interim compensation is as follows :

Category (i) – Rs.25 Lacs

Category (ii) – Rs.10 Lacs

Category (iii) – Rs.2.5 Lacs

2. An initial amount of Rs.25 Lacs will be released immediately to all the affected under category (i) whose information is already available with the Office of the District Administration. For the affected families under category, (ii) the amount of 10 lacs will be released immediately within an outer limit of 15 days, based on the information already available with the Office of the District Administration. The compensation amount, if any already paid, shall be deducted from the aforesaid amount of interim compensation.

3. The Office of the District Administration will compile a list of all those in Category (iii), who have been moderately / partially impacted, in consultation with the revenue officers, PWD, concerned circle officer, the Gaonburahs and community representatives of the affected villages. The disbursement of the amount will be completed expeditiously within an outer limit of 45 days from the passing of the order by the Hon'ble NGT for interim compensation.

4. The affected families, particularly under category (i) and (ii), whose names have been left out of the list would be entitled to the said amount after due verification within 7 days from the passing of the order by the Hon'ble NGT for interim compensation and the same will be disbursed within 15 days from the date of completion of the verification.

5. The interim compensation will be paid by OIL and from the funds which have already been made available to the Office of the District Administration. The balance amount, if any, will be made available immediately by OIL and as and when asked by the Office of the District Administration.

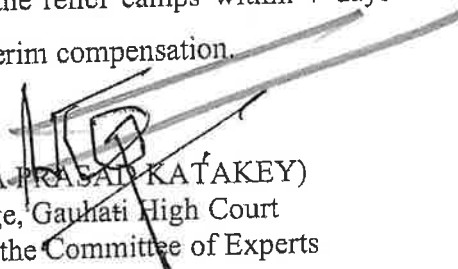
6. One-time compensation amounting to Rs.30,000/- that has been agreed to be paid by OIL to the affected families, who had moved to the relief camps due to Well Baghjan-5 blowout on 27.05.2020, as an immediate relief, will be disbursed immediately as per the list prepared by the circle officer, Doomdooma and available with the Office of the District Administration and not later than 7 days from the passing of the order by the Hon'ble NGT for interim compensation. The affected families whose names have been left out of the list would be entitled to the said amount after due verification and the same will be disbursed within 15 days from the passing of the order by the Hon'ble NGT for interim compensation.

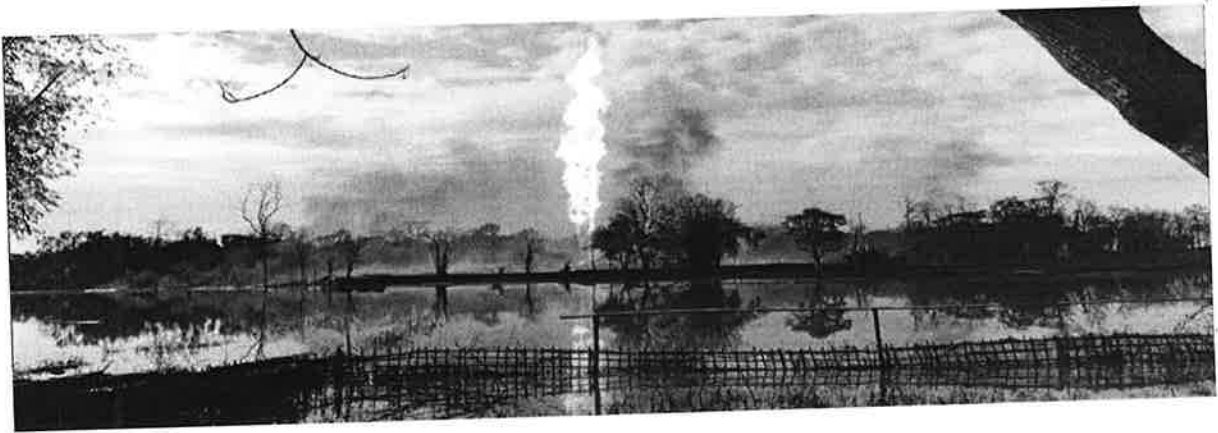
7. One-time compensation of Rs.25,000/- will be disbursed to each of the affected families and individuals who had shifted to the relief camps in the wake of the explosion in Well Baghjan-5 on 09.06.2020 as an immediate relief as per the list prepared by the Circle officer, Doomdooma and available with the Office of the District Administration and not later than 7 days from the passing of the order by the Hon'ble NGT for interim compensation. The affected families whose names have been left out of the list would be entitled to the said amount after due verification and the same will be disbursed within 15 days from the passing of the order by the Hon'ble NGT for interim compensation.

8. The interim compensation as well as the one time compensation, as stated above, will be credited directly to the bank accounts of the affected families and individuals by the Office of the District Administration. The said interim compensation is non recoverable and will be adjusted against the final compensation due to the affected families and individuals.

9. An immediate health insurance policy including COVID 19 will be made available by OIL to all affected individuals and families by the Well Baghjan-5 blowout and explosion and who are presently taking shelter in the relief camps within 7 days from the passing of the order by the Hon'ble NGT for interim compensation.

Place : Guwahati, Assam
Date : 24.07.2020


(BROJENDRA PRASAD KATAKEY)
Former Judge, Gauhati High Court
Chairperson of the Committee of Experts



PRELIMINARY REPORT

of

**The Committee of Experts constituted by the Hon'ble National Green Tribunal,
Principal Bench, New Delhi**

headed by

JUSTICE BROJENDRA PRASAD KATAKEY, FORMER JUDGE,
GAUHATI HIGH COURT, GUWAHATI

Submitted to

**THE HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW
DELHI**

On 24.07.2020

Volume II

Constituted vide Order dated Order dated 24.06.2020 in O.A No. 43/2020/EZ and O.A No.44/2020/EZ to
look into issues concerning Well Baghjan -5 in Tinsukia, Assam

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APPENDIX A

JULY 15, 2020



Impact of oil well blowout at Baghjan oil field,
Assam and resulting oil spill, on surrounding
landscape



भारतीय वन्यजीव संस्थान
Wildlife Institute of India

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*Impact of oil well blow out at Baghjan oil field,
Assam and resulting oil spill, on surrounding
landscape*

1 Executive Summary

The oil spill due to blow out of well number 5 of Baghjan on 27th May, 2020 and subsequent fire on 9th June, 2020 destroyed about 60-70 ha of area around the site. The oil spread out not only on land, but also dispersed into the surrounding rivers and wetlands. The loud noise due to the explosion can be heard as far as 12 km and beyond, making the area extremely unhealthy for



Figure 1.1 Landscape of Tinsukia and Dibrugarh districts. Protected areas in the vicinity are highlighted

humans and wildlife. The affected area is biodiversity rich and one of the important remaining refuge for several endangered and range restricted species.

Site survey and review of existing information from the surrounding landscape, which includes Dibru-Saikhowa National Park and Maguri-Motapung wetlands, indicates that the area harbours around 40 species of mammals, 450 species of birds, 104 species of fish, 11 species of chelonians, 18 species of lizards and 23 species of snakes, 165 species of butterflies and 680 plant species (Figure 1.1). The wetland and river in the area are also a critical lifeline for the surrounding communities. During the on-site survey a dead dolphin, several carcasses of dead fishes, herpetofauna and many species of insects were encountered. The oil spill has caused mortality and wilting of many plant species, and has severely affected the health of forests and grassland. There is a coating of oil film on the vegetation, the beel, riverfront, as well as on many species of river fauna, birds and mammals, in the impacted area. There is a leakage of hazardous and toxic chemicals, which is dangerous to life in general, and this toxicity is known to persist in aquatic and soil system for long, leading to prolonged ill effects on all life forms, including humans. Even after seven weeks of the incident, the leakage into the system continues, with no signs of containment. Sampling of water, sediments, dead organisms, vegetation and faunal survey indicates a wide ranging impact. We conducted impact study phase I from 29th May to 7th July, 2020.

Landscape fragility

The Brahmaputra and Ganges floodplain landscape is unique in its morphology and fragility, and is responsible for shaping the unique community of plants and animals evolved in this system like one horned rhinoceros, barasingha, wild buffalo, hog deer, pygmy hog, Bengal florican, white winged duck, marsh babbler, parrot bill, Ganges river dolphin, Asian small clawed otter, fish such as *Chitala chitala*, *Eutropiilchthys murius*, and many more. The landscape is fragile and is engineered by flooding. The dynamic nature of wetland create mosaics of habitat which are in perpetual flux. In India as well as world over, there are only handful of Protected Areas where this system and unique biodiversity is surviving, amongst them Dibru-Saikhowa National Park and Kaziranga-Orang National Park tops the list. Other Protected Areas like Manas (Assam), Valmiki (Bihar), Dudhwa and Hastinapur (Uttar Pradesh) have lost most of these aspects. *The landscape is vulnerable to earthquakes and occasionally large earthquakes, which cause large scale changes and damage.* We mapped changes in river courses and landscape from 1985 to 2020. *River courses were found to shift to a maximum of 240 metres/annum, and an especially high shift rate is recorded in Tinsukia and Dibrugarh districts*, as several rivers here have confluence with Brahmaputra (Figure 1.2). It is this dynamic riverscape changes which ensure long term survival of species adopted to

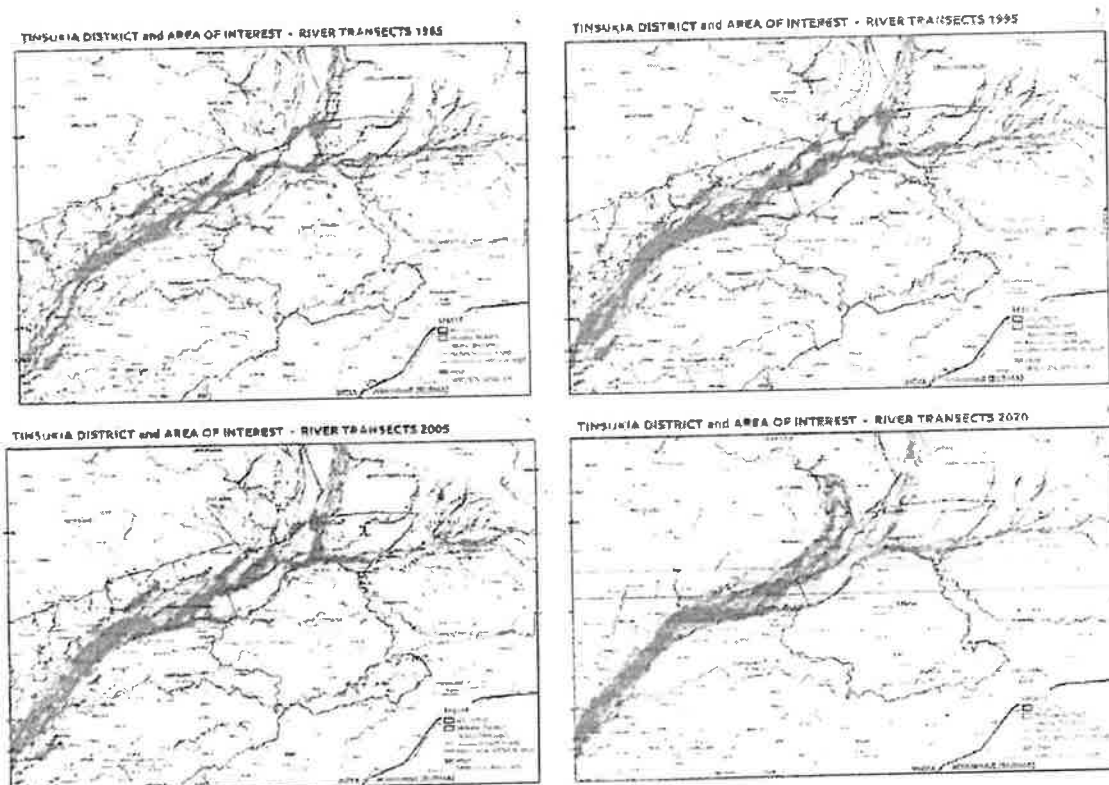


Figure 1.2 Change in river courses from 1985 to 2020 around Dibru-Saikhowa Biosphere Reserve

grassland-woodland succession, where longevity of site is not ensured but existence of grassland and swamps are ensured within landscape – shifting mosaic (Figure 2.1). Seismic data downloaded from IRIS and Earthquake tracker websites show that 15% of earthquakes are above 5 M and rest are of 3-4 M. Narula et al (2000) and Borghain et al (2016) defined 6 thrusts in this area indicating seismic vulnerability. *This seismicity, coupled with dynamic nature of the river systems make the landscape extremely fragile. Any changes to geomorphology will have far reaching consequences. Therefore, drilling for oil, and laying of oil pipelines needs to be evaluated keeping these concerns in mind.*

Contamination of air water and terrestrial system

Large amount of oil and associated pollutants were discharged in the system. We measured Nitrogen, Sulphur dioxide, Carbon monoxide and HCHO (formaldehyde) in the environment surrounding the well blow site using remote sensing data. NO_2 has shown 16 % increase on 27th May (on the day of the spill), which is highest recorded in our data time window (1st May to 10th July). SO_2 (Sulphur dioxide) levels spiked on 28th May, (a day after the oil spill) and highest recorded on 9th June (on the day of the blow out), 2020 and then subsided. HCHO (Formaldehyde) also show spike on 28th May, 9th June and highest on 21st June and CO (Carbon monoxide) levels does not show much changes before and after blow out. The burnt out area is

mapped as 65-70 ha which includes crop fields, grasslands and swamps. There was visible oil spill (oil and sediment) on 16th June, 2020 down stream of well.

Water and sediment pollution

The quality of water was assessed by measuring the essential physiological parameters such as pH, Dissolved Oxygen (DO), Total Dissolved Solids (TDS), Conductivity, Specific Conductance Temperature and PAHs pollutants. The dissolved oxygen value for Brahmaputra is reported to be 7.23 mg/l and maximum being 10.92 mg/l. We sampled when levels of DO were at their peak, and the levels of DO ranged from 0.94 mg/l to 7.35 mg/l in all samples, which is lower than minimum recorded value of Brahmaputra and barely above CPCB class A limits. DO level declined from the day of blowout, till our last sampling session on 22nd June 2020. Maguri-Motapung beel is worst affected and large scale death of aquatic fauna was observed. The concentration of PAHs (16 types analysed) in water of Lohit, Dibru and Maguri-Motapung ranged from 0.21 to 691.31 µg/L. The concentration was highest in Maguri-Motapung, followed by Dibru and Lohit rivers. The carcinogenic PAHs (Σ CPAH, sum of BaA, BbF, BkF, BaP, InP, and DbA) were also detected. It was found that Σ PAH concentrations in the present study were significantly higher than other studies in India (ranging from 6.0 – 143.2 µg/L (Malik et al, 2008, Chakraborty et al, 2014) and other part of the world (0.02 to 1.27 µg/L) (Brindha and Elango, 2013). The PAHs in soil and sediment samples ranged from 37.6 to 395.8 µg/Kg in comparison to other accidents in the world (96 to 2674 µg/Kg) (Yancheshmeh et al, 2014, Zeng et al, 2016).

In fish tissue samples the PAHs detected range between 104.3 to 7829.6 µg/Kg. The highest concentration was observed in fishes collected from Maguri-Motapung wetland. Among the detected PAHs in fish samples, Acenaphthene, Fluorene and Phenanthrene constituted the 95% of the total detected concentration. The total PAHs concentration reported in fish samples appears to be 10 - 100 fold higher than the earlier reported concentration in India (Dhananjayan and Muralidharan, 2012) and other parts of the world ranging from 0.53 – 1064 µg/Kg (Zabik et al, 1996; Akpambang et al, 2009; Levengood et al, 2011; Huang et al, 2014). The impact is significant and will have long term effect, as many of these pollutants will leach into the ground and contaminate ground water. Long term restorative efforts are needed for cleaning up these pollutants.

From the results of the study it can be concluded that Maguri-Motapung beel was severely damaged and polluted with respect to level of Dissolved Oxygen (DO), and total petroleum hydrocarbons. Also, we should worry about the long-term impacts of the oil spill in such a

biodiversity rich environment and important wetland area for water birds. The lifeline is not only biodiversity but also the livelihood of local communities.

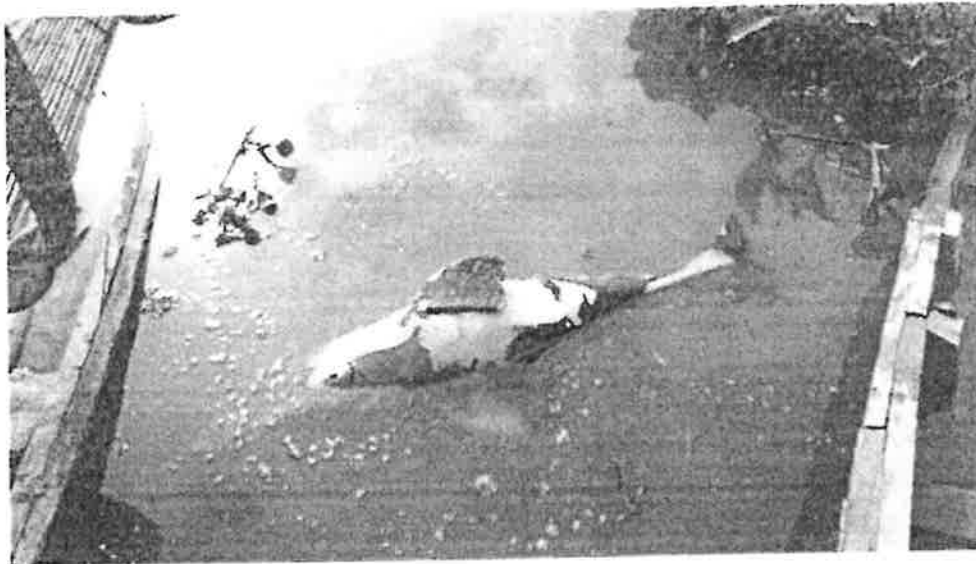


Figure 1.3 Dead Ganges river dolphin found in Maguri Motapong beel of Tinsukia.

Sound pollution - terrestrial and underwater

Sound plays important role for life on earth. Communication, resource use, predation, survival all have reliance on sound and thus evolution have shaped various life form to use different spectrum of sound. When sound become noise it is detrimental for living being, from modulating behaviour to causing serious injury and death. To measure environment noise level in and around the oil well explosion site, as well as underwater, we used a portable digital field recorder Tascam DR-100 (TASCAM Inc.) along with a Cetacean Research™ C57 hydrophone. We found that the sound level (dB weighted) was 96.48dB along Lohit river at a distance of 0.48 km and 112.68 dB on land at 0.1 km. We predicted the noise level with distance from the oil explosion point using the inverse square law that assumes equal sound propagation in all direction in an ideal condition. The predicted noise level from oil explosion point to 12 km ranges from 113 to 70db respectively (Figure 1.4). This level of noise will adversely impact mammals, birds and insects, from disorientation to health issues. Animals would be stressed, as they have to communicate at higher decibels.

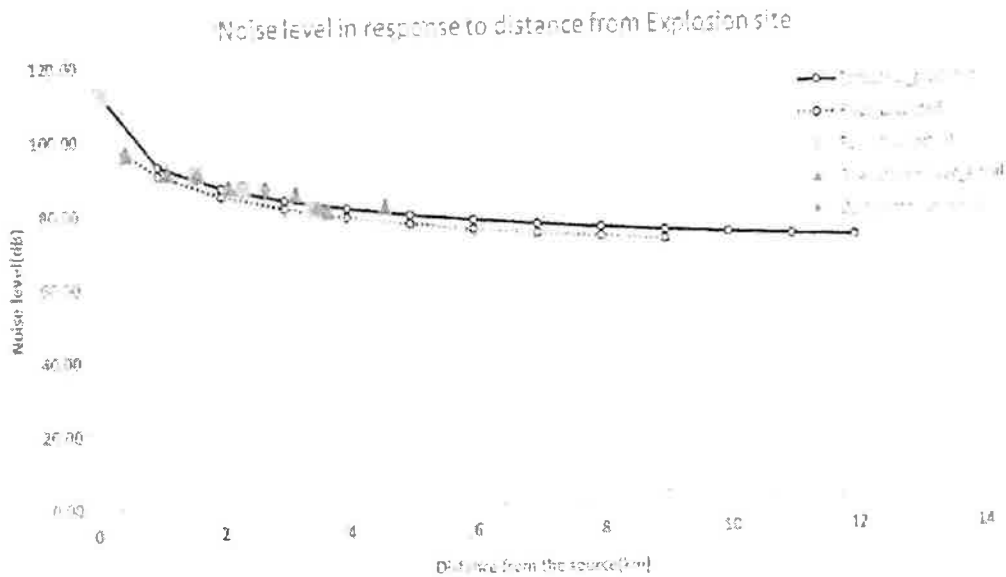


Figure 1.4 Noise level with response to distance from the explosion site; Gray colour arrows show the distance at which the 70dB industrial zone threshold is achieved

For humans sound level upto to 60db is the most comfortable. Noise above 70 dB over a prolonged period may damage hearing (Centers for Disease Control and Prevention, 2019). The standard limits set by WHO and CPCB ranges from 40 db (silence zone) to 65 db (Commercial zone). The noise level in 12 km radius of 70db or above made environment not suitable for the normal life for prolonged period as it may result in hearing loss and many other ailments. This level will also affect most of the birds and mammal species. The under water sound ranges from 5 Hz to 92 kHz (majority between 5 to 100 Hz) with pressure level ranging from 127 to 135 db. Most of the Ganges river dolphin communication happens in the range of 40 to 90 kHz.

Ganges river dolphin status

Survey was conducted in the month of May and June, 2020 to assess the status of dolphins. Passive acoustic monitoring (PAM) devices were used to understand occurrence and activity pattern of dolphins. A total of 54.15 hrs of acoustic data was recorded and analysed from three sites. We compared the abundance estimates with our earlier work in February 2020. In February, the encounter rate of Ganges river dolphin was 4.5/10 km, which was reduced to 1.5/10 km in May and by June it was 0.48/km indicating 89% decline in use of this area between February and June (Figure 1.5). One dolphin was found dead in Maguri-Motapung area due to oil poisoning (Figure 1.3). We recorded dolphin presence in Lohit and Dibru rivers, but no recording was detected of dolphin sound in Maguri-Motapung area, which was most impacted site. Moderate

and small size tributaries plays important role during monsoon as many dolphins move in these tributaries for refuge during monsoon.



Figure 1.5 Bagyan oil spill site and dolphin sightings recorded during different temporal surveys

Bird richness:

This area is famous for the presence of a large number of Critically Endangered and species of conservation concern. A total of 450 species of birds have been listed (Choudhury 2006, 2007; Das 2006, Rahmani 2016). A cumulative effort of 11 km was surveyed (Figure 1.6). Data from ebird was downloaded and used to draw comparisons between earlier occurrence reports at locations that fall within our sampling grid and current occurrence. Bird species richness increases with increase in distance from oil spill site.

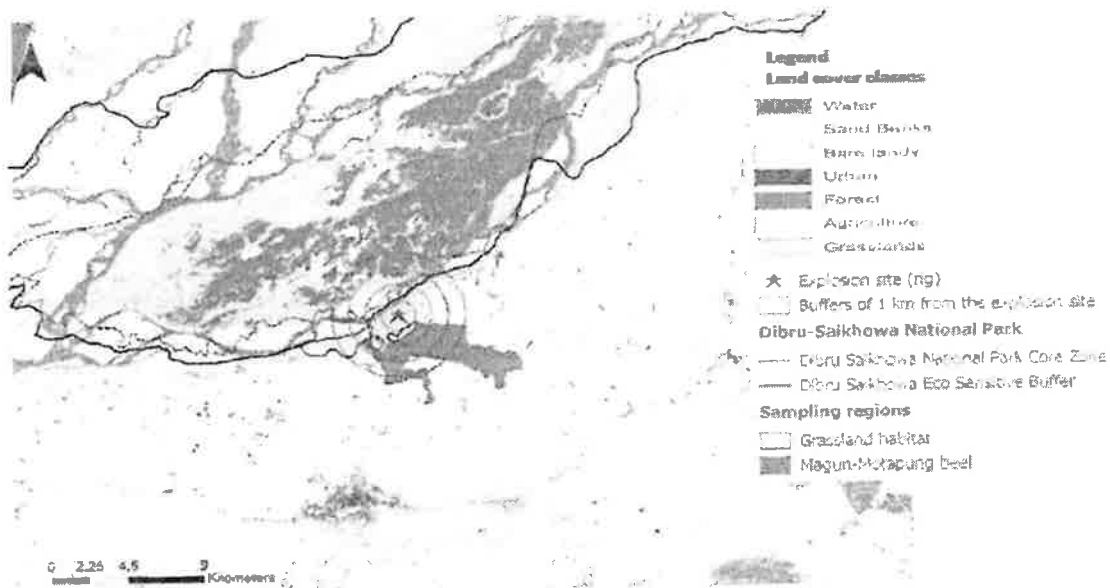


Figure 1.6 Sampling zones for impact on biodiversity up to 5 km, centered on oil blowout site

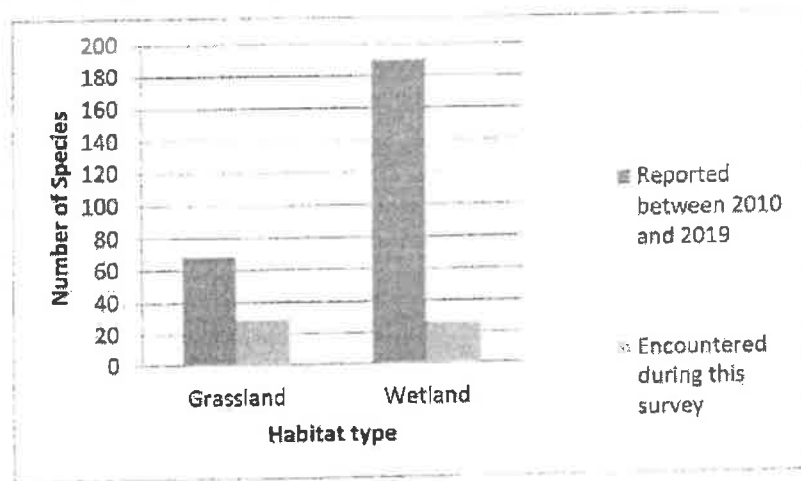


Figure 1.7 Comparison of resident species encountered in the explosion site before (from 2010-2019 from e-bird) and after well blow out (during this survey).

The bird data was compared with resident birds reported by birders on eBird (69 species in grassland and 190 species in wetland) with our surveys (28 in grassland and 28 in wetland) at the same surveyed sites. The decline in richness is evident in grassland (59%) and wetland (85%) (Figure 1.7). Survey team also recorded few abandoned nests at impact site. Its likely that birds are also sprayed with oil spill as oil has been seen covering the vegetation in more than a 2 km radius. Both oil spill as well as intense sound seems to be responsible for reduction in bird species richness and abundance. The effects of oil spill on birds are well known from many oil spills around the world from past. The overall effect of oil pollution on aquatic bird populations must be examined from two points of view: (1) the disastrous effects of oil spills and (2) the sub-lethal

and indirect effects of chronic exposure to low levels of hydrocarbons in the environment (Szaro, 1976).

Fish richness

This area is reported to have 104 species of fishes (Kalita, 2016). A total of 8 sites were sampled with gill net and cast net. 25 species of fishes belonging to 9 families was recorded. Cyprinidae family was found to be the most dominant family with 13 species. The overall richness and abundance of fishes declines with decrease in dissolved oxygen at different sites, which in turn was a result of the oil spill. There is significant difference between low and high DO level with species richness and abundance of fishes.

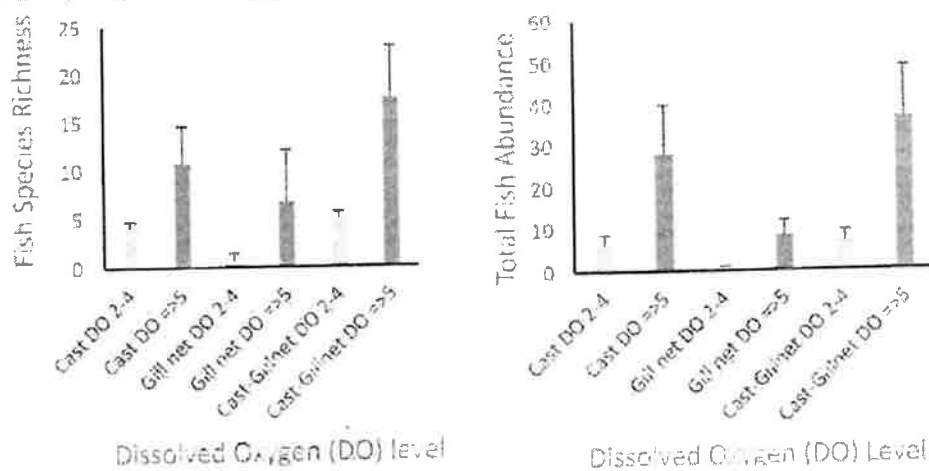


Figure 1.8 Fish species richness and abundance in two categories of water quality pertaining to Dissolve Oxygen (DO) level between 2-4 mg/l and above

Richness declines by 71 % and abundance by 81% between poor and good DO sites (Figure 1.8). DO levels are low in areas of oil contamination. We have seen fishes having visible symptoms on body due to oil toxicity, like loss of scales, decolouration, bleeding and excess mucous secretion. Large number of species have shown signs of oil impact (Figure 1.9 & Figure 1.10) *Cirrhinus reba*, *Banagaria derò*, *Labeo bata*, *Labeo calbasu*, *Sperata aor*, *Sperata seengola*, *Charina marulius*, *Charina punctatus*, and *Eutropilichthys vacha* has high economic value in market and fishes like *Puntius sophore*, *Puntius chola*, *Pethia gelius*, *Salmophasia bacaila*, *Barallius bama*, *Mystus vittatus*, *Xenotodon cancila*, *Anabus testudineus*, and *Parambassis ranga* are ornamentally important fishes. The abundance of these species was found to be significantly less in Dibru river and Maguri-Motapung beel, likely due to the mortality and avoidance of high toxic areas due to oil spill.

During our survey, maximum mortality of adult fishes had occurred in stagnant pools, as there is slow exchange of water and most of the fishes prefer stagnant pools during breeding period.

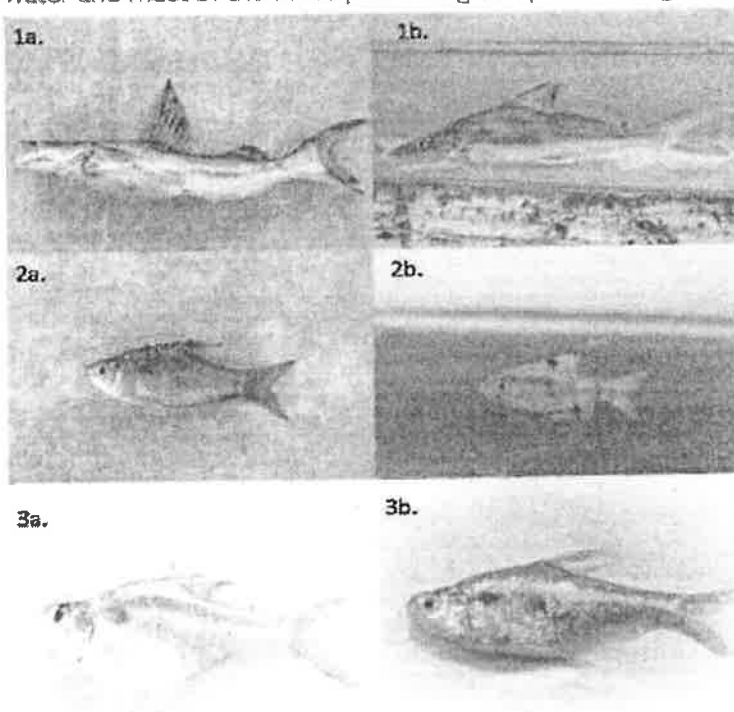


Figure 1.9 Pictures of normal and affected fishes: 1a) *Spherata seengahala*, 2a) *Pethia gelius*, 3a) *Osteobarma cotia* shows effect of toxicity on body of fish which were collected from Maguri-Matapung beel and Dibru river. Image 1b) *Spherata seengahala*, 2b) *Pethia gelius*, 3b) *Osteobarma cotia* are normal fishes which were captured during survey carried out in Kaziranga National Park in February 2020.

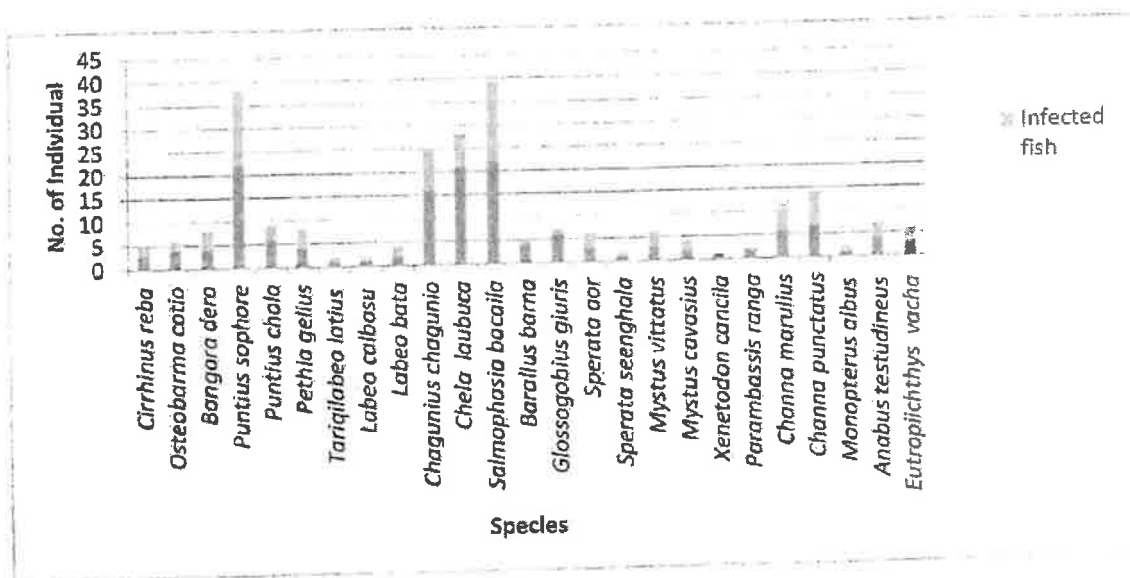


Figure 1.10 Percentage of individual infected fishes captured from Maguri-Matapung beel and Dibru river.

Butterflies and odonates richness

A total of 96 individuals belonging to 41 species of butterflies and 34 individuals of 13 species of odonates were sighted. Close to accident sites less insect species were found. The species richness at sites close to well saturated much faster, while site at 5 km has not saturated with current sampling (Figure 1.11)

Species richness and abundance of butterflies increases with distance from well blow out site indicating impact of oil spill.

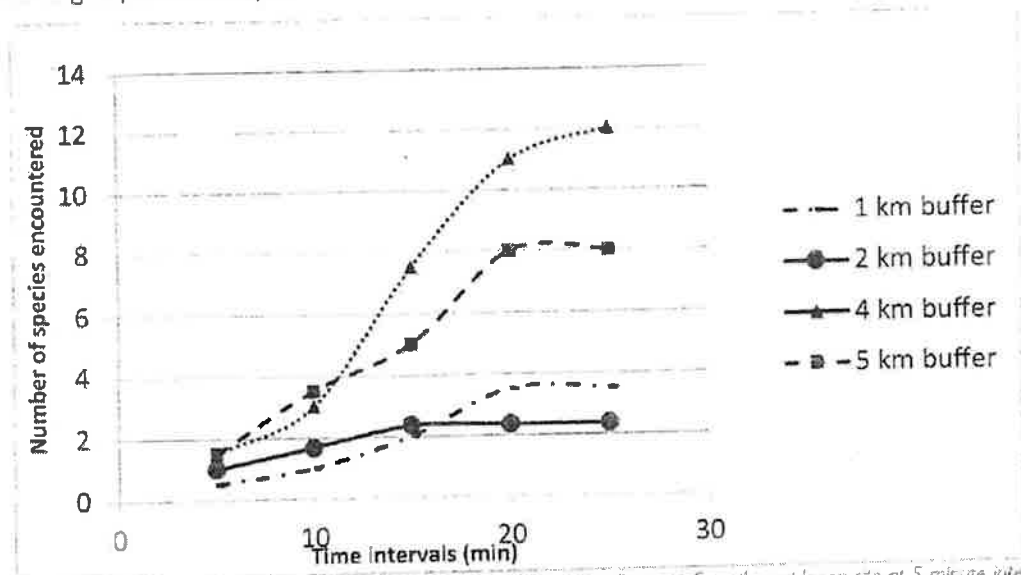


Figure 1.11 Species and number of butterflies encountered at varying distances from the explosion site at 5 minute intervals

Direct exposure to oil is known to negatively affect insects by altering different functions such as feeding and oviposition behaviour, gas exchange, cuticle permeability and cell membrane structural and functional destruction (Beattie et al. 1995; Mensah et al. 1995; Bogran et al. 2006).

Herpetofauna

This area is reported to have 17 amphibians, 13 turtle, 11 snakes and 8 lizard species. The survey was restricted to day time as flooding and lockdown of site after fire created sampling issues and thus it should be considered as partial. Work is underway and will be completed depending upon flooding scenario in this area. The checklist of Ahmed and Das (2020) provides what will be expected in this area.

Nine species of reptiles were recorded by us. The lack of any encounters of tadpoles in the multiple water pools that were encountered in the grids, despite being breeding season for many species, is a great concern. There was a direct impacts of explosion burn down at least in 500 m, and impacts of oil spill seems to be the likely cause for reduced encounter of species. We

have found live herpetofauna from 500 m up to 6 km from the oil well explosion site and carcasses at 400 m and 6 km.

People

We have not carried out any work on socio-economics and health impacts on humans. The oil well blow out definitely seems to have impacted the physical and economic health of local communities (Rishu Kalantri 2020, thelogicalindian.com). The contaminants will have long term impact and need appropriate mitigation measures.

Issues with operation of Gas and oil wells

There are two major issues with companies operating oil and gas wells in Assam: a) Management of oil spills from their wells, and b) emergency response readiness and effectiveness in terms of major accidents. The oil leakage is a chronic problem and leaching of oil in water and underground have ecological and health cost, as has been observed in the case of several wells across Eastern Assam. As far as major accidents like well blowout in Assam is concerned, the entire focus seems to be on closure of well and no restorative process is put in place for remediation of effect of oil in terrestrial or aquatic system, it is left to nature to heal herself.

Two oil well blow outs earlier occurred in Assam, Dikom and Naharkatia-Deohal, and we seemed to have not learned any lessons. We are unable to obtain any meaningful information about restoration of areas surrounding earlier well blow outs. This seems to be the same in the case of the blowout at Baghjan, with no effort to engage experts for remediation due to oil spill. The site inspection by NBWL Standing committee report stated *"We are deeply distressed that OIL, as a leading public sector company, instead of serving as a beacon for environmental compliance to others in the industry, appears to have evaded environmental norms"* (Madhusudhan & Bindra, 2013). The report also highlighted development of mitigation plan in case of incidences such as the one that has just happened. OIL does not have any information on their website nor have they provided information about their emergency plans as to how to deal with leaks and blowouts and restoration plans in case of oil spill despite our request for this information.

Conclusion

The evaluation of landscape and biodiversity indicate large-scale impact of oil spill on flora and fauna. Our evaluations and results point out to a substantially high level of PAHs pollutants, some of which are carcinogenic, being present in the system. We also recorded excessive noise level, which is detrimental to animal and human health. While the impact of sound may be taken care after plugging, the effect of PAHs will remain in the system for a long time. Decline in Ganges

dolphin use of this area, as well as one dolphin mortality, death of fishes, insects, herpetofauna, birds and impact on health of most of the animals observed, are related to oil spill and well blowout. There is a substantial decline in the biodiversity of the area, resulting in an unsuitable habitat for aquatic and terrestrial life, which is clearly visible in the mortalities observed. Humans in this area are also impacted. To counter the decline observed in mammals, birds, insects and herpetofauna, it will take time and substantial restorative efforts to regain former diversity levels. Vegetation in large area is also observed to be sprayed with oil due to blow out and has impacted the landscape in its entirety. Given the fragility and seismicity of the landscape, the impact of the oil blow out, and importance along with the uniqueness of biodiversity existing in the area, following needs to be done for safeguarding this landscape:

- 1) The potential of oil blow out and oil spill like disaster like this a reality and therefore such oil wells in the vicinity of Dibru-Saikhowa National park and IBA complex (Maguri and Motapung, Poba Reserve Forest, Kobo chapori, Amarapur chapori and) will be detrimental to the conservation value of this unique ecosystem. Due consideration needs to be given to this threat for future development.
- 2) More than 25 wells (Dibru-Saikhowa ESZ notification) are planned and almost same number exist in this conservation complex/s (Dibru-Saikhowa National Park, Bherjan Wildlife Sanctuary, Padumani Wildlife Sanctuary and Borajan Wildlife Sanctuary, Important Bird Areas (IBA) Poba Reserve Forest, Kobo chapori, Amarapur chapori and Maguri and Motapung, Dihing-Patkai Wildlife Sanctuary) needs to be re-evaluated for their cumulative impact on biodiversity value of this landscape.
- 3) Safety audit for all other wells currently operating or planned need to be done. Risk management study need to be done to ensure appropriate risk mitigation strategies. Detail management plan needs to be developed for safety measures and dealing with oil leakage.
- 4) Observing the ecological disaster caused by this incident, the proposed oil exploration and development in Mechaki, Mechaki extension, Baghjan and Tinsukia Extension PML (MoEFCC EC dated 9th April, 2020) needs to be reassessed, since this is the habitat of Critically Endangered species of this region.
- 5) OIL should have dedicated team and advanced training of their personnel to deal with emergencies arising out of leakage, blow out and any other accidents which is possible due to extraction, transportation and storage of highly volatile and risky chemicals.

- 6) Adequate finances should be for all restorative work in Wildlife areas Protected or otherwise and compensate local people for their losses. There should be annual payment to Forest Department for restoration and subsequently for management of this conservation complex. Adequate consultation by Forest Department should be done to involve experts in the field of Oil spill remediation and restoration.
- 7) A long term study should be initiated to understand the long-term impact of this oil spill and blowout impact on the ecology and environment of Maguri-Motapung beel and Dibru-Saikhowa National Park as well as on the health and socio-economic conditions of local communities around the affected areas. Impact of the oil spill on the livelihood of local communities especially on ecotourism based on Maguri-Motapung beel and Dibru-Saikhowa National Park needs to be assessed.
- 8) Restoration will be long-term process and appropriate committee should be formed to develop, monitor and guide the process.

2 Context

A blow out of oil well occurred on 27th May 2020, at the Baghjan oil field of Oil India Limited in Assam (Figure 2.1), which caught fire on 9th June 2020. The oil and gas leaked into the system and still continues to do so (mid July, 2020). It has severely impacted wildlife, its habitat and humans. Study was undertaken to assess the damage to biodiversity and integrity of the ecosystem. The area is biodiversity rich, having several protected areas and important biodiversity hotspots in its surrounding, Dibru-Saikhowa National Park, Bherjan Wildlife Sanctuary, Padumani Wildlife Sanctuary and Borajan Wildlife Sanctuary. Important Bird Areas (IBA) include Poba Reserve Forest, Kobo chaponi Proposed Reserve Forest, Amarpur chaponi and Maguri and Motapung beel (Figure 2.1).

Accident occurred close to the Dibru-Saikhowa National Park and Maguri-Motapung Beel. Dibru-Saikhowa National Park is 340 km² and the Biosphere reserve (DSBR) spans over 425 km². This is located in the Tinsukia and Dibrugarh districts of Assam. This area has recorded at least 40 mammals, 450 species of birds, 104 fish species, 165 butterfly species and 680 plant species, 11 species of chelonians, 18 species of lizards and 23 species of snakes (Dibru Saikhowa Management Plan, Choudhury 2006, 2007; Das 2006, Madhusudan and Bindra, 2013, Kalita, 2016). The area harbours tiger, elephant, wild buffalo, leopard, hoolock gibbon, capped langur, slow loris, Gangetic river dolphin, amongst others. The birds of conservation concern like Bengal Florican, White winged duck, Slender-billed vulture, White-rumped vulture, Baer's Pochard, White-bellied Heron, Adjutant storks, Yellow-breasted Bunting, Harriers, Swamp Francolin, Pale-capped Pigeon, Bristled Grassbird, Marsh Babbler, Jerdon's Babbler, Black-breasted Parrotbill, Yellow Weaver, Oriental Darter, Black-necked Stork, Ferruginous Duck, Red-breasted Parakeet, Blyth's Kingfisher, Great Pied Hornbill, Spot-billed Pelican and, Rufous-vented Prinia (Choudhury 2006, 2007; Rahmani et al. 2016; Bhatta et al 2016) occur in this area. Among herpetofauna, it is home to the critically endangered Black Soft-shell Turtle, Narrow headed Soft-shell Turtle, Assam Roofed Turtle, Indian Flapshell Turtle, Water Monitor lizard, Indian Roofed Turtle, Burmese Rock Python and several species of range-restricted frogs (Ahmed & Das, 2020). Good population of Ganges river dolphin occur in the rivers, mainly in Lohit and Siang River surrounding Dibru-Saikhowa National Park. Maguri-Motapung beel is one of the major wetlands in Tinsukia District of Assam, which encompasses ~10 km² area, and is also severely impacted by the oil spill. While the species found in this area largely overlaps with Dibru Saikhowa National Park, until date 294 species of birds have been recorded from this area, and is as an Important Bird Area. Thousands of migratory birds visit the wetland in winter. The first record of species like Baikal Bush Warbler and

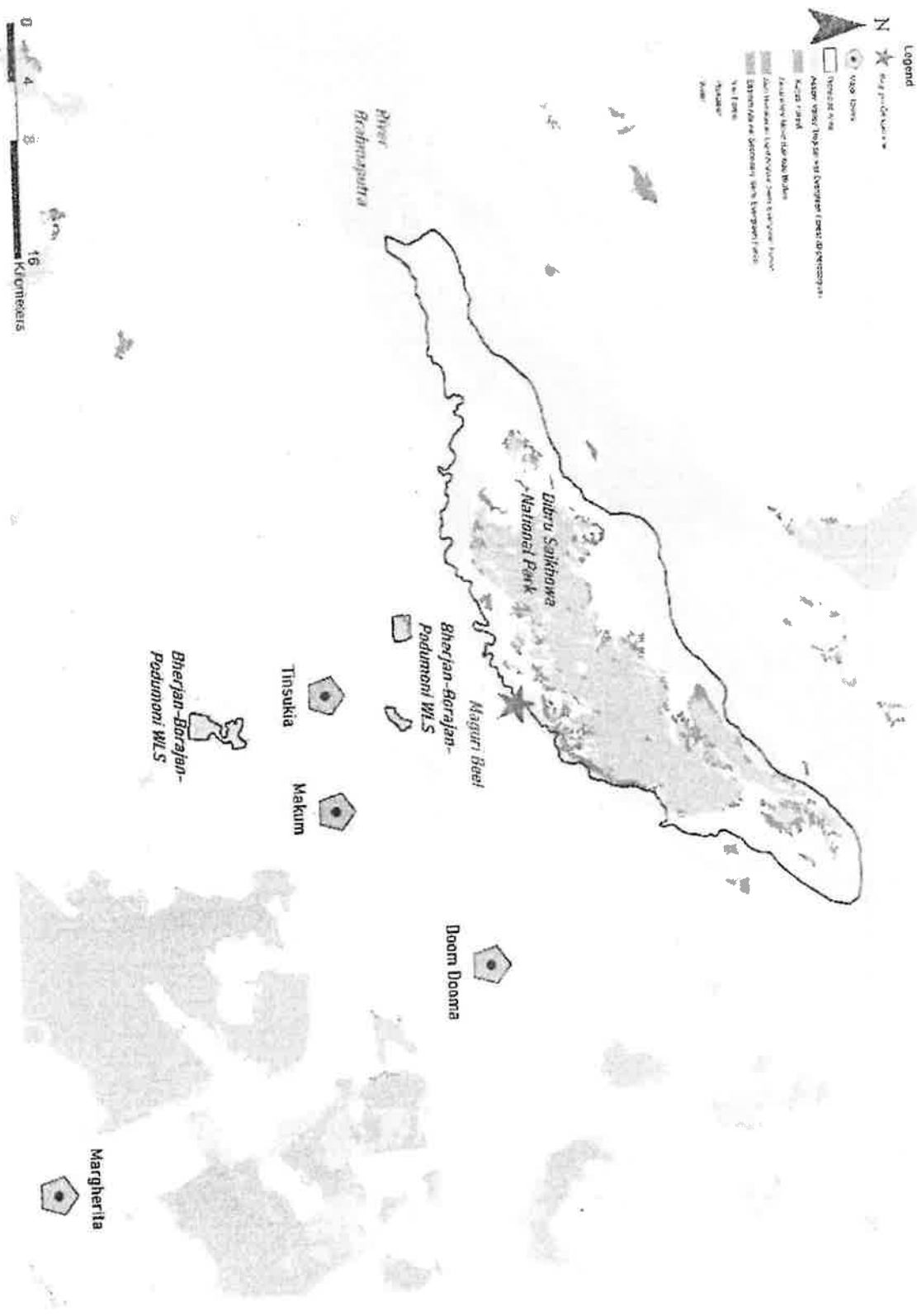


Figure 2.1 Landscape of Tinsukia and Dibru-gurjari districts. Protected areas in the vicinity are highlighted

White-browed Crane are also from this area, highlighting the need to conserve IBA (D Gogoi, pers.comm & eBird). A similar incident occurred at the OIL well in Dikom in 2005, which took almost a month to contain and that too with the help of international agency Boots & Coots Well Control Inc (Naqvi, 2020). The site inspection by NBWL Standing committee report stated "We are deeply distressed that OIL, as a leading public sector company, instead of serving as a beacon for environmental compliance to others in the industry, appears to have evaded environmental norms" (Madhusudhan & Bindra, 2013). The report also highlighted development of mitigation plan in case of incidences such as the one that has just happened. There seems to be no clear information on the mitigation plan as suggested by the site inspection report. DFO-Tinsukia, Wildlife Division, has written to OIL seeking clarification on mitigation plan (DFO-Tinsukia Wildlife Division, pers comm). It is important to note that the present spill has not stopped and is still polluting and contaminating the surrounding areas. A similar incident in the Kalamazoo river, USA took several years and millions of dollars to contain.

The current oil spill occurred in an area that is bordered by protected areas, rivers and important wetlands and Important Bird Area, which are the lifeline of not only biodiversity but also the livelihood of local communities. Having occurred in the monsoon season, the extent of impact due to the spread of toxic hazardous gases and chemicals through air and water has spread far more than the usual area of impact, causing large-scale damage. People in the area have reported severe breathing difficulty, headaches and nausea. Noise pollution was big irritant causing severe unease and health issues. Even our survey team has suffered from the same symptoms, and experienced heavy presence of oil and chemicals in the environment and intolerable noise. The sound can be heard even about 10-12 km away from the place of accident. The smell of oil permeates the entire landscape, with plants covered with layers of oil due to continuous leakage till now. There is seepage of oil to the nearby wetland and other water bodies adjacent to Baghjan (D Gogoi, pers comm.).

Oil well blow out spews a wide range of chemicals in air, water and ground, contaminating the impact zone and surroundings. The hydrocarbon component comprises of large number of organic compounds, many of which are hazardous when released into the environment, for e.g. Polycyclic aromatic hydrocarbons (PAHs) amongst others. The distressing aspect of these compounds is their property of persistence and toxicity (Liu et al. 2020). These carcinogenic compounds get widely distributed in water, soil, sediment and air, and as they do not get photochemically and biologically oxidised or decomposed, their accumulation in these systems is very high (Zhao et al. 2017; Gundlach 2017; Guzzella and De Paolis 1994). Some of the effects

of this type of contamination has been reported to be hypothermia, skin and eye irritation, indigestion, dehydration, impaired reproduction and/or pneumonia in many taxa (Environmental Protection Authority, 1993). These toxic chemicals persist in the environment in particulate matter and sediments, and when environmental condition changes, they are again released into water, leading to secondary pollution and long term toxicity in these areas, which is a worrying scenario for all life forms, including humans.

Adding to the concerns is the high seismic nature of this area, where the oil wells are operating. The whole region has been subjected to frequent changes in morphology owing to recurrent earthquakes. These earthquakes are known to have caused extensive landslides and ground fissuring, amongst other effects to morphology. The region is known to have experienced several high magnitude earthquakes within a short period. Thrusts, faults and folds are a common characteristic of the region, exacerbating the concerns of oil drilling in the region, where sediments and rocks of the region have been experiencing compressive forces (Borghain et al. 2016).

3 Landscape Fragility

The Brahmaputra and Ganges floodplain landscape is unique and this uniqueness has shaped the biotic community that have evolved in adaptation to this landscape, like the one horned rhinoceros, barasingha, wild buffalo, hog deer, pygmy hog, Bengal florican, white winged, marsh babbler, parrot bill, Ganges dolphin, Asian small clawed otter, fish such as *Chitala chitala*, *Eutropiichthys murius*, and many others. This landscape is particularly fragile and is engineered by flooding. The dynamic nature of wetland creates mosaics of habitat which are in perpetual flux. In India as well as world over, there are only handful of Protected Areas where this system and unique biodiversity is surviving, amongst them Dibru-Saikhowa and Kaziranga-Orang tops the list. Other Protected Areas like Manas (Assam), Valmiki (Bihar), Dudhwa and Hastinapur (Uttar Pradesh) have lost most of these aspects. This landscape is also vulnerable to earthquakes, with many fault lines and occasionally large earthquakes, causing changes and large scale damage. We mapped changes in river courses and landscape from 1985 to 2020. River courses are known to shift to a maximum of 240 m/annum, and an especially high shift rate is recorded in Tinsukia and Dibrugarh districts, as several rivers have confluence with Brahmaputra here. This high rate of change causes a shifting mosaic of grassland and swamps, where the habitat at a particular site is not ensured, but due to constant change, the habitat exists within the landscape. It is this dynamic riverscape changes which ensure long term survival of species adapted to grassland-woodland succession. Seismic data downloaded from IRIS and Earthquake tracker websites show that 15% of earthquakes are above 5 M and rest are of 3-4 M. Narula et al (2000) and Bongohain et al (2016) defined 6 thrusts in this area, indicating seismic vulnerability. This seismicity, coupled with dynamic nature of the river systems make the landscape extremely fragile, and any changes to geomorphology having far reaching consequences. Therefore, drilling for oil, and laying of oil pipelines needs to be evaluated keeping these concerns in mind.

3.1 Introduction

Fragility and resilience of a landscape are interconnected and it is difficult to completely tease them apart. In this particular context, fragility is more relevant as it proves to be an important criteria on which we need to evaluate the changes in landscape, either natural or manmade. Fragility of a landscape defines the outcome of any action for all the elements within it i.e., wildlife and humans, their interaction and subsequent effects. This section addresses the larger

conservation context, and how incidents like oil blowout and large scale developmental planning without regard to ecology make a system fragile and robs it from the inherent capability of resilience, leading to disastrous consequences.

Understanding the landscape fragility is especially crucial in the plains of Assam, as it is prone to earthquakes, and the rivers flowing through this landscape are extremely dynamic, carrying heavy sediment loads, making this landscape even more delicate. The Assam valley is a result of several tonnes of deposition of sediment brought in by the rivers Brahmaputra and Barak (Baro and Kumar, 2017). According to Angelier and Baruah (2009), the thickness of the sediment reaches 5 km from the ground surface. Below this heavy deposit of sediments lie several active tectonic faults which have been the source faults of past earthquakes (Baro and Kumar, 2017). These features make the Assam plain rivers vulnerable to change. Avulsion is a common geomorphic process responsible for course changes with many rivers of the Ganga-Brahmaputra plain (Borgohain et al 2016). Dibrugarh has 21.34% of forest cover and Tinsukia about 41.76 % cover (Forest Survey of India, 2019)(Figure 2.1). These districts have a mosaic of habitat comprising of Salix Swamp Forest, Wet and Dry grasslands, Tropical Moist Deciduous, Tropical Semi-evergreen, Evergreen Forests and Cropfields-Orchards (Rahmani et al. 2016).

3.2 River Morphology

Measuring change

Geomorphology helps in understanding the relationship between river forms and processes, water and sediment fluxes, ecosystem and habitat relationships. Owing to the dynamic nature of rivers in the region, the changes in the tributaries of Brahmaputra, as well as main stream Brahmaputra river, in and around Dibru Saikhowa National Park, at the site of oil spill was estimated using time series land cover data. This helps in visualizing the changes in river morphology. These quantifiable changes in river are used to derive braiding index to locate zones which are prone to further change. Also channel displacement rate is calculated in these zones. This data along with land cover changes is used to understand the changes in river morphology. For detailed methodology, see Section 9.1 & 9.3.

River course has undergone lot of changes around Dibru-Saikhowa national park. Sand bars have shown considerable changes in this part of the river and so the braiding index also is seen changing from 1985 to 2019-20. This continuous change in braiding index signifies the ever changing river morphology. Braiding index helps correlating the geology with land cover changes to understand the morphology of changes and the possibilities of future changes (see Section 9.3)

Table 5-3 Concentration ($\mu\text{g/Kg}$) of PAHs among water samples collected from the Lohit river, Maguri-Motapung Wetlands and Dibru river.

PAHs	Lohit River											Maguri-Motapung Wetland		Dibru River		
	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8	W-9	W-10	W-11	W-12				
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.62	0.26	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	174.6	2.61	0.21	0.80
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	691.31	ND	2.80	7.28
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.33	0.42	ND	0.45
Pyrene	0.22	ND	ND	ND	ND	0.23	ND	ND	6.12	0.31	ND	ND	0.56			
Benz[a]anthracene	ND	ND	ND	ND	ND	BQL	ND	BQL	6.61	BQL	BQL	BQL				

Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.97	0.38	BQL	0.36
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	0.29	ND	0.27	9.18	0.33	0.27	0.27	0.52	
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	BQL	ND	BQL	7.17	BQL	BQL	BQL	BQL	
Dibenzol[a,h]anthracene	ND	ND	ND	ND	ND	ND	BQL	ND	ND	14.82	ND	ND	ND	ND	
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	BQL	ND	BQL	8.34	BQL	BQL	BQL	0.24	
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND	ND	ND	BQL	ND	BQL	12.82	ND	BQL	BQL	BQL	

ND – Not Detected, BQL – Below Quantifiable Limit

Table S-4 Concentration ($\mu\text{g/l}$) of PAHs among sediment samples collected from the Lohit river, Maguri-Motapung Wetlands and Dibru river.

PAHs	Lohit River												Maguri-Motapung Wetland		Dibru River	
	S.S-1	S.S-2	S.S-3	S.S-4	S.S-5	S.S-6	S.S-7	S.S-8	S.S-9	S.S-10	S.S-11	S.S-12				
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	37.60	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	152.30	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	395.8	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz[a]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd] pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Detected

Table 5-5 Concentration ($\mu\text{g}/\text{kg}$) of PAHs among fish collected from the Meguru-Motapung wetland and Lohit river.

PAHs	<i>Puntius sophore</i> *	<i>Mystus vittatus</i> *	<i>Channa orientalis</i> *	<i>Rasbora daniconus</i> *	<i>Eutropichthys vachca</i> #
Naphthalene	ND	ND	104.3	166.9	ND
Acenaphthylene	ND	ND	ND	129.6	ND
Acenaphthene	475.5	566.1	821.5	1500.9	ND
Fluorene	2779.4	3131.8	2829.9	7829.6	ND
Phenanthrene	7466.1	7770.0	7002.7	200.1	ND
Anthracene	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	0.178.9	347.4	ND
Pyrene	ND	ND	136.5	317.7	ND
Benz[a]anthracene	ND	ND	169.3	145.1	ND
Chrysene	ND	ND	135.0	240.4	ND
Benzo[b]fluoranthene	ND	ND	ND	ND	ND

Benzo[k]fluoranthene	ND	ND	ND	ND	ND
Benzo[a]pyrene	ND	ND	ND	ND	ND
Dibenzo[a,h]anthracene	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND	ND
Indeno[1,2,3-cd] pyrene	ND	ND	ND	ND	ND

* fish collected from Maguri-Matapung Wetland, * fish collected from Lohit river, ND – Not Detected

The post-mortem report provided by DFO-Tinsukia Wildlife Division, of the Ganges dolphin carcass found in the Maguri-Motapung wetland was observed to be in accordance with the previously reported effect of PAHs on mammals (Appendix 12). The observations included extensive haemorrhages in gastrointestinal tract, haemorrhages and edema in lungs, haemorrhages and ventricular damages in heart, haemorrhages in stomach, intestinal lumen and liver parenchyma, congestion in kidney and brain. The post-mortem report suggested the probable cause of death of the dolphin could be inhalation or ingestion of toxic substance leading to hypoxia. DeGuise et al, (2017) in their study on dolphins exposed to oil at Barataria Bay, Louisiana, also reported the similar health effects such as adrenal and lung abnormalities in dolphins that stranded and died within the oil spill footprint. Specifically, dolphins post oil spill had a prevalence of thin adrenal gland cortices, severe pneumonia, and primary bacterial pneumonia. The study supported the conclusion that exposure to petroleum products from oil spill led to adrenal and lung disease in dolphins and contributed to the observed increase in dolphin mortalities.

5.6 Risk valuation of PAHs in aquatic ecosystem

Risk valuation of PAHs is subjected to two laboratory derived factors: a) median lethal dose (LD50), a statistically derived single oral dose of a compound that will cause 50 % mortality of the test population; b) the median lethal concentration (LC50), concentration of a substance in the diet that is expected to lead to 50 % mortality of the test population. Many PAHs are acutely toxic to aquatic organisms at very low doses. The sensitivities of fish to Acenaphthene, Fluorene, Phenanthrene and Benza[a]anthracene was observed to be greater than other detected PAHs in the fish tissues. A recent compilation of lethal concentration (LC50s) for the different aquatic organisms obtained from USEPA ECOSAR software tool (USEPA, 2012) have been listed in Table 5-6

The obtained results with significantly higher levels of PAHs in water and fish samples indicate an increased level of toxicological impact on various wildlife species. As mentioned in Table 5-6, the concentration of PAHs in the water and fish samples are found to be several times higher than the LC50 concentration. The observed levels of PAHs in the present study is reported to have severe impacts on fishes, plant and microbes, birds, reptiles, amphibians and mammals. Petroleum can adversely affect organisms by physical action (smothering, reduced light), habitat modification (altered pH, decreased dissolved oxygen, decreased food availability), and toxic action. Large discharges of petroleum are most likely to produce notable effects from physical action and habitat modification. The mechanism of toxicity is reported to cause interference with cellular

membrane function and enzyme systems associated with the membrane (Neff, 1985). The resulting biochemical disruptions and cell damage lead to mutations, developmental malformations, tumours, and cancer (Eisler, 2000; Santodonato et al, 1981). The PAHs affects different organisms at different level and in different ways based on their physical, chemical and biological functions.

Table 5-6 The Acute Toxicity Level (LC50) of PAHs in some of the aquatic species (USEPA 2012).

PAHs	Abb.	Fish	Daphnid	Green Algae	Mysid	Water	Fish
		96 h	48 h	96 h	96 h	Max. detected concentration	
		LC50	LC50	EC50	LC50	Present Study	
Naphthalene	Nap	9390	5940	6910	4010	-	166.9
Acenaphthylene	Acpy	2280	1550	2420	5000	-	129.6
Acenaphthene	Acp	1480	1030	1740	327	22.62	1500.9
Fluorene	Fl	2110	1450	2330	511	174.6	7829.6
Phenanthrene	Phe	1150	810	1470	220	691.31	7770
Anthracene	Ant	1150	810	1470	220	-	-
Fluoranthene	Flu	390	290	660	50	13.33	347.4
Pyrene	Pyr	390	290	660	50	6.12	317.7
Benz[a]anthracene	BaA	129	101	290	11	6.61	169.3
Chrysene	Chr	130	100	290	11	9.97	240.4
Benzofl[uoranthene	BbF	42	35	125	2.5	9.18	-

Benzo[k]fluoranthene	BkF	42	35	125	2.5	ND	-
Benzo[a]pyrene	BaP	42	35	125	2.5	7.17	-
Dibenz[a,h]anthracene	DBA	14	12	54	0.55	14.82	-
Benzo[g,h,i]perylene	BghiP	14	12	54	0.55	8.34	-
Indeno[1,2,3-cd]pyrene	InP	14	12	54	0.55	12.82	-

The highest detected PAHs (Acenaphthene, Fluorene and Phenanthrene) in water and fish sample have high toxic effect on the aquatic environment. Acenaphthene damages the DNA of cells and affects endocrine activity. A bigger concern is the potential for acenaphthene to build up in aquatic sediments, which could pose a risk to organisms that dwell in or near the bottom of lakes and rivers. Effect of fluorene studied on fingerling bluegills showed that 62 µg/L adversely affected their ability to capture prey, 120 µg/L reduced growth, and 1000 µg/L increased their vulnerability to predation. Fluorene, at concentrations well below its solubility and at levels that could realistically occur in the environment, represents a potential hazard to aquatic organisms (Finger et al, 1985). In animal studies, exposure to fluorene affected the blood system and spleen (USEPA, 2002). Ninety three percent mortality was observed in the embryo of rainbow trout administrated with the phenanthrene (85 µg/L) self-explained its toxicity for fishes (Black et al, 1983).

5.6.1 Plants and Microbes

Reports of the effects of petroleum spills or discharges on plants and microbes contain accounts of injury or death of freshwater wetland vegetation (Burk, 1977; Baca et al., 1985); enhanced or reduced biomass and photosynthetic activity of phytoplankton communities (Johansson et al, 1980; Shailaja, 1988); genetic effects on terrestrial plants (Klekowski, 1994); and microbial community changes and increases in numbers of microbes (Braddock et al, 1995; Megharaj, 2000). Lethal and sublethal effects are caused by contact with oil or dissolved oil, systemic uptake of oil compounds, blockage of air exchange through surface pores, and possibly by chemical and physical alteration of soil and water, such as depletion of oxygen and nitrogen, pH change, and decreased light penetration. Individual PAHs, at low concentrations (5 to 100 ppb) can stimulate or inhibit growth and cell division in aquatic bacteria and algae. At high concentrations (0.2 to 10 ppm) the same PAHs interfere with cell division of bacteria and cell division and photosynthesis of algae and macrophytes; they can also cause death (Neff, 1985; Eisler, 2000).

5.6.2 Fish

Heavy exposure to petroleum in adult and juvenile fish through ingestion of contaminated food or water can lead to their death. Petroleum concentrations (total petroleum hydrocarbons) in water of less than 500 µg/L during long-term exposure (Woodward et al, 1983). Sublethal effects begin at concentrations of less than 500 µg/L and include changes in heart and respiratory rates, gill structural damage, enlarged liver, reduced growth, fin erosion, corticosteroid stress response, immunosuppression, impaired reproduction, increased external and decreased internal parasite burdens, behavioral responses, and a variety of biochemical, blood, and cellular changes (Barnett

and Toews, 1978; Malins and Hodfins, 1981; Thomas and Budiantara, 1995; Kuehn, 1995; Gregg et al, 1997; Khan, 1999; (Collier et al, 2013; Vinget et al, 2016). Eggs and larvae can suffer adverse effects, including death, when exposed to concentrations of petroleum in water ranging from less than 1 µg/L (total PAHs) up to 500 µg/L (total PAHs or total petroleum hydrocarbons) (Marty, 1997; Heintz et al, 1999; Carls et al, 1999). Effects of oil on eggs and larvae include death of embryos and larvae, abnormal development, reduced growth, premature and delayed hatching of eggs, DNA alterations, and other cellular abnormalities (Malins and Hodgins, 1981; Brown, 1996; Marty, 1997; Heintz et al, 1999; Carls et al, 1999)

5.6.3 Reptiles and Amphibians

Carcass of various species of reptiles and amphibians were found at the site of blowout. Earlier studies have also reported death and sub lethal effects of PAHs such as grossly inflated lungs, fatty livers, and abnormal behaviour in Bullfrog tadpoles (McGrath and Alexander, 1979). Sensitivity of the amphibian larvae to oil is reported to be slightly less, but it can cause reduced growth or reduced food (algae) densities and could prevent metamorphosis of green frogs at high exposure (Mahaney, 1994; Lefcort, 1997)

5.6.4 Birds

Birds have also been reported to be affected by petroleum through external oiling, ingestion, egg oiling, and habitat changes. External oiling disrupts feather structure, causes matting of feathers, and produces eye and skin irritation. Death often results from drowning (Vermeer and Vermeer, 1975; Tseng, 1993; Jenssen et al, 1994) Birds that spend much of their time in the water, such as alcids (Alcidae), waterfowl (Anatidae) are the most vulnerable to surface oil. Petroleum can be ingested through feather preening, consumption of contaminated food or water, and inhalation of fumes from evaporating oil. Ingestion of oil is seldom lethal, but it can cause many debilitating sublethal effects that promote death from other causes, including starvation, disease, and predation. Effects include gastrointestinal irritation, pneumonia, dehydration, red blood cell damage, impaired osmoregulation, immune system suppression, hormonal imbalance, inhibited reproduction, retarded growth, and abnormal parental behaviour (Eppley, 1992; Jenssen, 1994; Fowler et al, 1995; Walton, 1997). Petroleum spilled in avian habitats can have immediate and long-term effects on birds. Fumes from evaporating oil, a shortage of food, and clean-up activities can reduce use of an affected area (Parsons, 1994; Day, 1997).

5.6.5 Mammals

The metabolism and effects of some PAHs have been well documented in laboratory rodents and domestic mammals but poorly documented in wild mammals. Target organs for PAH toxic action are skin, small intestine, kidney, and mammary gland; tissues of the hematopoietic, lymphoid, and immune systems; and gametic tissue. Aquatic mammals are long-lived and have relatively large amounts of body fat (necessary for energy storage, thermoregulation, etc.), placing them at significant risk for accumulating lipophilic organic contaminants. This makes aquatic mammals both vulnerable to and sensitive indicators of acute and chronic exposure to recalcitrant contaminants. Chronic effects may impair reproductive performance, immune function, or even survival for individuals and, if widespread, affect the status of a population and community (NRC 2003). Evidence suggests that chronic and/or acute exposure to oil may lead to a range of ailments and conditions including skin irritation, conjunctivitis, hepatic and hypothalamic lesions, hepatic necrosis, cancer, and poor survival of offspring (Engelhardt 1982, Martineau et al. 1994, Loughlin et al. 1996, Peterson et al. 2003). Inhalation exposures are a concern for any air-breathing organisms (e.g. sea turtles, mammals, birds, humans) near the oil spilled surface. Cetaceans breathing just above the air/water interface would likely be more consistently exposed to the highest concentrations of surface oil droplets, than either birds or humans. Large mammals may also ingest prey that has oil or its metabolites in their tissues. Inhalation of evaporating oil is a potential respiratory problem for mammals near or in contact with large quantities of unweathered oil. Some of the previously described disorders are thought to be caused by hypothermia, shock, and stress rather than direct toxic action; distinguishing between the two types of causes can be difficult. Similarly, the unique cetacean physiological and anatomical adaptations for respiratory efficiency associated with diving would increase the impacts of oil inhalation and aspiration (Takeshita et al. 2017).

6 Sound pollution from the oil well blowout

Noise levels upto 5 km from oil blow out, on surface and under water, was measured. Sound plays important role for life on earth. Communication, resource use, predation, survival all have reliance on sound and thus evolution have shaped various life form to use different spectrum of sound. When sound become noise it is detrimental for living being, from modulating behaviour to causing serious injury and death. To measure environment noise level in and around the oil well explosion site, we used a portable digital field recorder Tascam DR-100 (TASCAM Inc.). Sound recording was done along Lohit river 4 km upstream to 5km down stream from well blow out site and on land upto 4km.

We found that the sound level (dB weighted) was 96.48dB along Lohit river at a distance of 0.48 km and 112.68 dB on land. The predicted noise level from oil explosion point upto 12 km ranges from 113 to 70db (Figure 5). For humans sound level upto to 60db is the most comfortable. Noise above 70 dB over a prolonged period may damage hearing (Centers for Disease Control and Prevention, 2019). The standard limits set by WHO and CPCPB ranges from 40 db (silence zone) to 65 db (Commercial zone). The noise level in 12 km radius of 70db or above made environment not suitable for the normal life for prolonged period as it may result in hearing loss and many other ailments. This level will also affect most of the birds and mammal species. The under water sound ranges from 5 Hz to 92 kHz (majority between 5 to 100 Hz) with pressure level ranging from 127 to 135 db. Most of the Ganges dolphin communication happens in the range of 40 to 90 kHz.

6.1 Surface noise monitoring

To measure environment noise level in and around the oil well explosion site, we used a portable digital field recorder Tascam DR-100 (TASCAM Inc.). Sound level in the surrounding environment was recorded along the river Lohit on 3rd July, and in and around the explosion site (rig area) at the oil fields on 4th July, 2020.

Along the Lohit river, sound level recording was done up to 5 km downstream (to Guijan ghat) and 4 km upstream from the oil explosion site. Along this 9 km stretch, recording was carried out every 500 m - 1 km. Around the rig area on land, sound level recording was done for up to 4 km distance from the explosion site, once every 1- 2 km. With the recordings, a spectrogram was generated to visualize the spectrum of frequencies (i.e. the amount of energy in the sound at each frequency) of the signal (Figure 6.1).

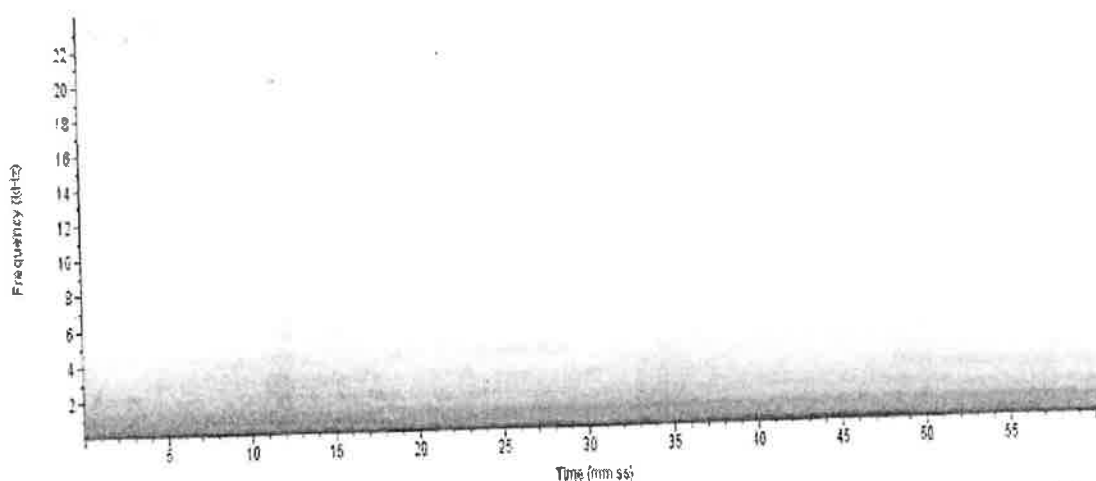


Figure 6.1 A representative spectrogram of environmental noise. Horizontal axis represents time, and the vertical axis represents frequency. The amplitude is a third dimension of a particular frequency at a particular time and is represented by the intensity of the colour.

For each of our 13 sound recordings, we selected the required sound clip on the spectrogram from Raven software and measured average power and peak power. For detailed methodology, see Section 9.8

While the extent of frequency range audible by young people lies between 20 to 20,000 Hz, human ears are most sensitive to hear between 500 Hz and 6,000 Hz, than any frequency beyond these limits. The conventions used here to denote these terms are as follows, LA= A-weighted power, LAeq= equivalent A weighted power, LAmax= maximum A weighted power. LA is synonymous with dBA and dB(A) and is often written as LA = xdB. The standard thresholds of environment noise as per WHO guidelines are in Appendix 13.

From the recordings obtained by us, we found that the peak power at 0.48km from spill site is 150.2dB along the Lohit River and at 0.1 km, the peak power was 163.2 dB on the land (Table 6-1 & Table 6-2). Both of these go beyond the environment noise usually found (Figure 6.2).

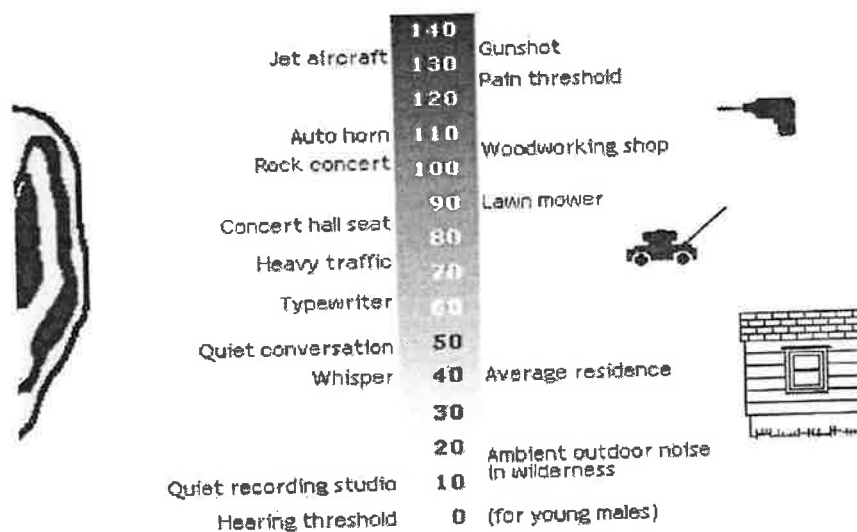


Figure 6.2 Sound levels of common sounds in air re 20 μPa. (© University of Rhode Island)

Table 6-1 Summary of the noise level recordings at various distance from the oil explosion site in Baghjan along Lohit river.

Sl.no	Aerial Distance from spill (From River Lohit)	Gain	avg power (dB)	peak power (dB)	dB(A)
1	0.48	10	116.5	150.2	96.48
2	1.15	10	111.2	146.1	91.18
3	1.62	10	110.1	144.2	90.08
4	2.12	10	107.3	140.5	87.28
5	2.7	10	106.5	141.1	86.48
6	3.18	10	105.2	139.1	85.18
7	3.53	10	100.9	134.4	80.88
8	3.7	10	100.6	134.6	80.58
9	4.6	10	101.7	133.9	81.68

Table 6-2 Summary of the noise level recordings at various distance from the oil explosion site in Baghjan in the rig area on land

Sl.no	Aerial Distance from spill (Explosion site)	Gain	avg power (dB)	peak power (dB)	dB(A)
1	0.1	10	132.7	163.2	112.68
2	1.59	10	110.9	144.8	90.88
3	2.34	10	106.6	140.8	86.58
4	3.45	10	101	136.6	80.98

Table 6-3 Centre pollution control Board (CPCB) permissible limits for noise level

Area code	Category of area/zone	Limits In dB(A) LAeq*	
		Day Time	Night Time
A	Industrial zone	75	70
B	Commercial zone	65	55
C	Residential zone	55	45
D	Silence zone	50	40

We found that the sound level (dB weighted) was 96.48dB(A) along Lohit river at a distance of 0.48 km and 112.68 dB(A) on land at 0.1 km. From our study, we predicted the noise level with increase in distance from the oil explosion point using the inverse square law that assumes equal sound propagation in all direction in an ideal condition. We have seen that in both upstream and downstream in the Lohit river up to 9-10 km radius from the oil explosion point the noise level was higher than 70db. In the terrestrial habitat (oil explosion site) the 70db Limit was found to be in a Radius of 12 kilometre. Up to 60db is the most comfortable sound level for Humans. Noise above 70 dB over a prolonged period of time may start to damage hearing (CDC), with the standard limits set by WHO (Appendix I3) and CPCB (Table 6-3), which was almost near the limit for a big public event such as ceremonies, festivals and entertainment events and far

exceeds the night time limit for industrial zone area. This makes the environment not suitable for the normal life for prolonged period as it may result in hearing loss.

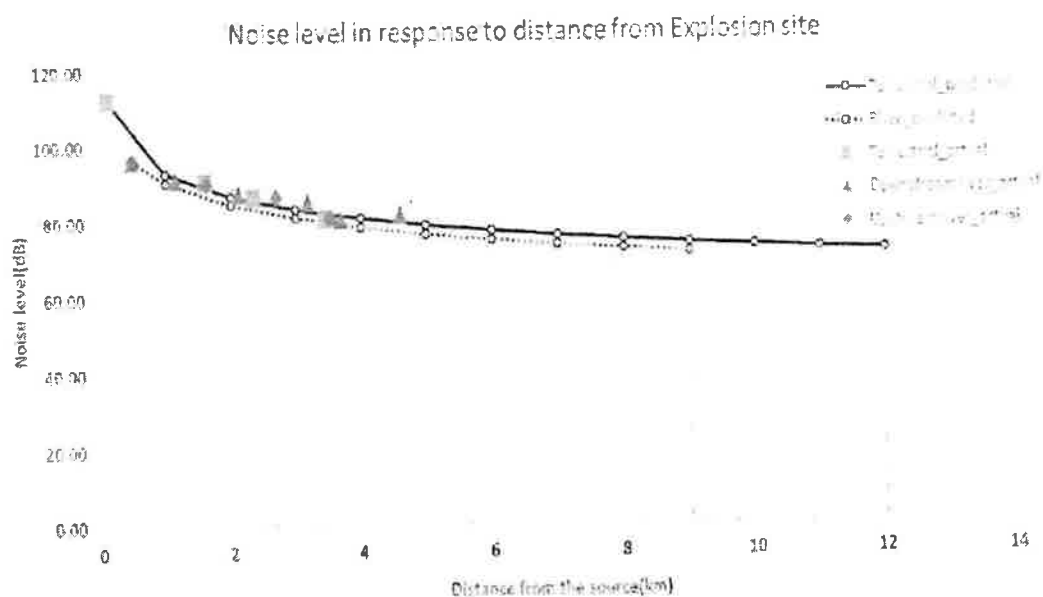


Figure 6.3 Noise level with response to distance from the explosion site.
 * Gray colour arrow show the distance at which 70dB industrial zone threshold is achieved

On river the dampening of sound is less due to negligible obstruction compared to on land where structure impede and reverberate (Figure 6.3) This will cause high stress level for the Humans settled nearby as its higher than the normal norms prescribed by both WHO and CPCB (Also see Appendix I3I & Table 6-3). Noise beyond a threshold is a threat to wildlife as well.

6.2 Underwater noise monitoring

Passive acoustic monitoring (PAM) device (The Cetacean Research™ C57 hydrophone series) along with the portable digital field recorder Tascam DR-100 (TASCAM Inc.) were used to monitor underwater sound in June 2020. They were deployed at 500m intervals of the river to get a sound profile. Sound level in the underwater environment was recorded along the river Lohit on 3rd July, 2020. Along the Lohit river, underwater recording was done 7 km downstream (to Guijan ghat) and 4 km upstream from the oil explosion site. Along this 11 km stretch, recording was carried out within every 500m - 1 km. For detailed methodology, see Section 9.9. Man-made noise has the potential to induce a stress response in aquatic fauna changing there physiological, hormonal, and behavior response. (Wright et al., 2007). Typical Sound Pressure Levels for various sources is given in Table 6-4.

Table 6-4 Typical Sound Pressure Levels for various sources by National Oceanic and Atmospheric Administration (NOAA)

The amplitude of Example Sounds	In Air	In Water
	(dB re 20µPa @ 1m)	(dB re 1µPa @ 1m)
Threshold of hearing	0 dB	--
Whisper at 1 meter	20 dB	--
Normal conversation	60 dB	--
Painful to the human ear	130 dB	--
Jet engine	140 dB	--
Blue whale	--	165 dB
Earthquake	--	210 dB
Supertanker	128 dB (example conversion)	190 dB

At 3.53 km upstream of the Lohit river the mean SPL level was 128.7 dB. While at downstream around 6.51 km the mean SPL was 127.9 dB. The loudest noise was recorded at 0.48 km from the oil explosion site with a mean SPL of 135 dB noises (Table 6-5). The noise levels from the sound files were within a frequency bands upto 92kHz and Majority of sound lies between 5 to 100 Hz (Figure 6.4).

Table 6-5 Mean SPL at various points in the upstream of river Lohit from the oil explosion site

Sl.No	Aerial Distance from spill (Explosion site)	Mean SPL
1	3.53	128.7
2	2.7	130
3	1.62	127.1
4	0.96	133.3
5	0.48	135

Table 6-6 The mean SPL at various points in the downstream of river Lohit from the oil explosion site.

Sl.No	Aerial Distance from spill (Explosion site)	Mean SPL
1	0.48	135
2	1.15	134.5
3	2.12	114.8
5	3.18	135.3
5	3.7	124.2
6	4.6	121
7	5.55	113.2
8	6.51	127.9

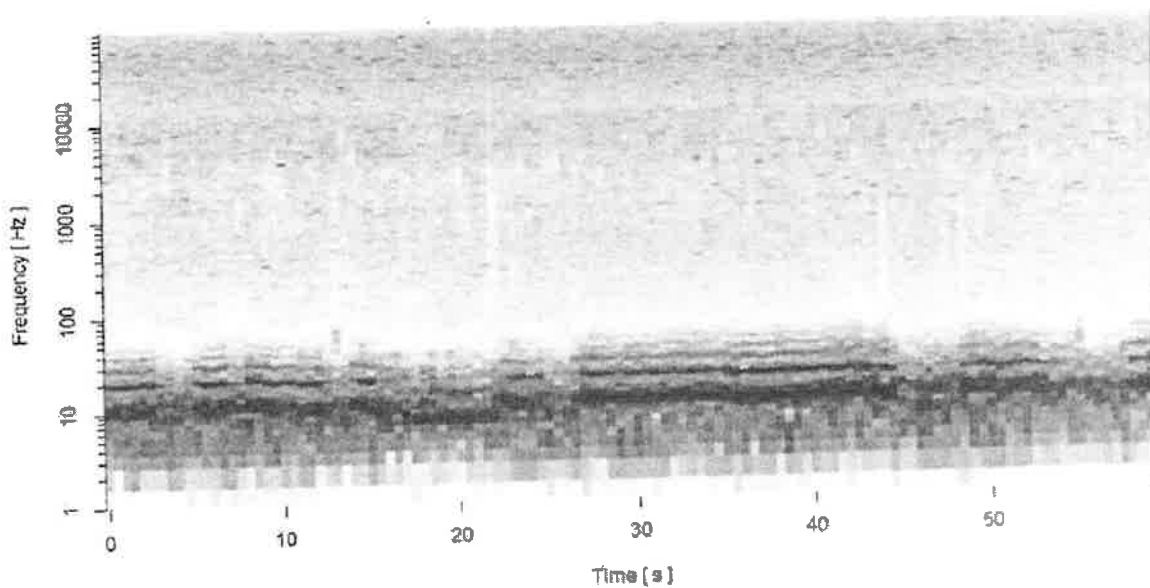


Figure 6-4 Power Spectral Density (PSD) view in the spectrogram

From the spectrogram of the underwater sound at 0.48 km from the oil explosion site the mean SPL was found to be at 135 dB re 1 μ Pa. The underwater sound level is found to be within normal limits, but any continuous emission of anthropogenic noise can lead to degradation of the aquatic environment which will in turn affect the aquatic life (Table 6-7)

Table 6-7 Effects of Human-Generated Sound on aquatic biodiversity (Rako-Gospic and Picciulin, 2019)

Species	Physiological Effects	Hearing Loss and Masking	Behavioral and Acoustic Response
Fish	Increased cortisol; hematological responses	Damage to inner ear sensory cells; reduced auditory sensitivity; increase in vocalization rate	Startle response, deep diving; changes in group cohesion; reduced foraging performance; changes in antipredator responses; reduced ability to maintain their territory; modifications of foraging habits, increase defensive acts
Molluscs	Reduced embryos development and increased mortality of hatched larvae; developmental delays of larvae	Injury in statocysts	Alarm responses (such as ink ejection in squid) and changes in swimming patterns and vertical position
Crustaceans	Variations in hemolymphatic parameters; increase in the metabolism	Currently unknown	Latency to a predator threat
Marine mammals	Hormonal changes; increased heart rate; suppression of immunity; higher oxygen consumption; hypoxia; fat and heart emboli	Damage to ears (degeneration of sensory and hair cells, cochlea and auditory nerve), PTS, TTS associated to higher mortality; shifts in vocalization frequency, increased vocalization rate; increased call duration, cessation of vocalization	Changes in diving behavior, movement speed and orientation; changes in vocalization and group cohesion, habitat displacements; shifts of migration routes

7 Biodiversity Survey

Dolphins: Compared to an earlier survey in February where the encounter rate of Ganges dolphin was 4.5/10 km, it was reduced to 1.5/10 km in May and by June it was 0.48/km, indicating 89% decline in use of this area. One dolphin was found dead in Maguri-Matapung area most likely due to oil poisoning. We recorded dolphin presence in Lohit and Dibru rivers but no recording was made of dolphin sound in Maguri-Matapung area which was most impacted site.

Bird richness: This area is famous for Black-breasted Parrotbill, Marsh Babbler, White-winged Duck, Bengal Florican, Jerdon's Bushchat and Swamp Grass babbler. A total of 450 species of birds have been listed (Chaudhury 2006, 2007; Das 2006, Rahmani 2016). This area has six Critically Endangered, six Endangered, 12 Vulnerable, and 16 Near Threatened species of birds (Rahmani, Islam and Kasambe, 2016). The habitat in the affected area is segregated into Grassland and wetland. Data from eBird was downloaded and used to draw comparisons between earlier occurrence reports at locations that fall within our sampling grid and current occurrence. Bird species richness increases with increase in distance from oil spill site. The bird data was compared with resident birds reported by birders on eBird. The decline in richness is evident in grassland (59%) and wetland (85%). Survey team has recorded abandoned nest at impact site. The effects of oil spill on birds are well known from many oil spills around the world from past. The overall effect of oil pollution on aquatic bird populations must be examined from two points of view: (1) the disastrous effects of oil spills and (2) the sub-lethal and indirect effects of chronic exposure to low levels of hydrocarbons in the environment (Szaro, 1976).

Fish richness: Dibru-Saikhowa National Park part is reported to have 104 species of fishes. The sampling was carried out with gill net and cast net at a total of eight sites. We have recorded about 25 species of fishes belonging to 9 families. Cyprinidae family was found to be the most dominant family with 13 species. The overall richness and abundance of fishes declines with decrease in dissolved oxygen at different sites. We have seen fishes having visible symptoms on body due to oil toxicity. During our survey, maximum mortality of adult fishes had occurred in stagnant pools, as there is slow exchange of water and most of the fishes prefer stagnant pools during breeding period. *Cirrhinus reba*, *Banagana dero*, *Labeo bata*, *Labeo calbasu*, *Sperata aor*, *Sperata seengala*, *Channa marulius*, *Channa punctatus*, *Eutropiichthys vacha* has high economic value in market and fishes like *Puntius sophore*.

Puntius chola, *Pethia gelius*, *Salmophasia bacella*, *Baralius bama*, *Mystus vittatus*, *Xenotodon cancala*, *Anabus testudineus*, and *Parambassis ranga* are ornamentally important fishes. The abundance of these species was found to be very less in Dibru river and Maguri-Motapung beel, likely due to the mortality or and avoiding high toxic areas due to oil spill.

Butterflies and odonates richness: A total of 96 individuals belonging to 41 species of butterflies and 34 individuals of 13 species of odonates were sighted. Species richness and abundance of butterflies increases distance from well blow out site. Our survey team has found carcasses of burnt odonates as well as live ones with oil film on wings. Direct exposure to oil is known to negatively affect insects by altering different functions such as feeding and oviposition behavior, cuticular gas exchange, cuticle permeability and cell membrane structural and functional destruction (Beattie et al. 1995; Menach et al. 1995; Bogrun et al. 2006).

Herpetofauna: The survey was restricted to day as flooding and lockdown of site after fire created night sampling issues and thus it should be considered as partial. Work is underway and will be completed depending upon flooding scenario in this area. The checklist of Ahmed and Das (2020) provides what will be expected in this area. Nine species of reptiles were recorded by us. The lack of any encounters of tadpoles in the multiple water pools that were encountered in the gnds, despite being breeding season for many species, is a great concern. Though this time of the year in a flood-prone season makes it difficult to discern whether the cause of apparent wipe out of herpetofauna is floods or the explosion, the direct impacts of explosion through burn down is certain for at least 500 m, and impacts of oil spill remains a crucial component to another. We have found live herpetofauna from 500 m up to 6 km from the oil well explosion site and carcasses at 400 m to 6 km.

People: We have not done any work on socio-economics and health impacts on humans. The oil well blow out had economic and health impact on humans (Rohu Kalantri 2020, thelogicalindian.com). The contaminants will have long term impact and need appropriate mitigation measures.

Given that the maximum impact area was Dibru-Saikhowa National Park and Maguri-Motapung Wetland, we started with our preliminary reconnaissance survey to assess the impact on flora and fauna in the surrounding region. The animal sampling were carried out since 29th May 2020, to 10th July 2020.

7.1 Monitoring of Ganges River Dolphin (*Platanista gangetica gangetica*)

Earlier studies on cetacean (which includes whales, dolphins and porpoises) health due to exposure to oil spills has reported lung injuries (Stabenau et al. 2006); physical injuries to the respiratory tract by irritating tissues/membranes during aspiration of liquid oil deposited on the blowhole (Gentina et al. 2001). These resulted into moderate to severe lung diseases causing pneumonia, lung abscesses, pulmonary infections and adrenal toxicity (Schwacke et al. 2013, Venn-Watson et al. 2015). On the other hand, ingestion of petroleum oil while foraging on oil-contaminated prey resulted into deposition of petroleum hydrocarbons at highest level in blubber followed by liver and other tissues (Geraci and St. Aubin 1982, Engelhardt 1983). However, another important aspect of effect of oil spill on cetacean is their ranging patterns and habitat use. Experimental results reported from captive dolphins has demonstrated their ability to detect slick oil conditions and avoid entering those areas consistently (Geraci et al., 1983; St Aubin et al., 1985). While in wild, although they are capable of detecting slick and mousse oil conditions, it was observed that eventually they enter those zones with some initial hesitations (Smultea and Würsig, 1995). This was suggested as multi- year site fidelity to small home ranges in dolphins (Wells et al. 1987, Wells et al. 2017) where they continuously access the area despite of having noxious stimuli to oil. The strong impulse for migration, which is an important event of life history of cetaceans, remained unaffected with the presence of oil on their way (Evans 1982). In both of these cases, the chance of continuous exposure of the animal to the toxicity of petroleum hydrocarbon product increases, which can remain in the area for longer duration (Wells et al. 2017, Mullin et al. 2017).

This study was conducted between May and July, 2020, to understand the changes in distribution pattern of Ganges dolphin in Lohit- Dibru stretch of Brahmaputra due to the recent oil spill and blowout of oil well that happened in the month of May, 2020 in that area. The affected Maguri-Motapung Beel, has connectivity with the Lohit river, through Dibru river, stretch which is also a potential habitat of Ganges dolphins. Two temporal surveys were carried out in the Lohit-Dibru River. The first survey was conducted (post oil spill and before oil well explosion) in the month of May 2020 covering a 32 km stretch with the blowout site as centre. The second survey was conducted during June 2020 in a 62km stretch of Lohit River (Figure 7.1). The distribution was then compared with previous years surveys conducted in this area in the month of February, from 2012-2020.



Figure 7.1 Baghjan oil spill site and dolphin sightings recorded during different temporal surveys.

As per the survey done in February 2020, before the oil spill accident happened, the dolphin encounter rate was 4.5 per 10km. In the same stretch, after oil spill, the encounter rate was 1.5 per 10 km (Table 7-1). This indicates a decline in use of the habitat by dolphin after oil spill.

Table 7-1 Estimates before and after oil spill within a 20km stretch of affected zone of the Brahmaputra River

Estimates	Feb, 2020	May, 2020
N-Hat	9.0	5.0
SD	0.61	0.01
UCI	10.0	5.02
LCI	8.0	4.98
Total effort	20	32
Encounter rate per 10 km	4.50	1.50

In June 2020 survey, we estimated a significantly lower encounter rate (0.48/ 10km stretch) in the Lohit River (from Bhupen Hazarika Setu to Siang-Lohit confluence at Baliyan), which shows 89% reduction (Table 7-2). While the previous surveys were carried out during low water (winter) season, this particular survey was conducted during high water (monsoon) season. The distribution pattern changes during monsoon as they are reported to move towards tributaries to escape increasing water levels in the river main stem (Kasuya and Haque, 1972). In Dibru river, 5 dolphins were sighted in a 4 km stretch. But it is unlikely that the number solely declined at this level in Lohit River due to migration. A decline in dolphin population solely due to increase in water level is more likely to happen on northern side of Dibru-Saikhowa, in larger channel of Brahmaputra, than in Lohit River.

Table 7-2 Estimates of Ganges dolphin population during previous surveys in Lohit- Dibru stretch of Brahmaputra River.

Estimates	Lohit 2012	Lohit 2018	Lohit 2020	Feb 2020	Jun 2020
N-Hat	23	34		28	3
Sd	2	2.39		3.00	0.01
UCI	26	39		33	3
LCI	19	29		23	3
Total stretch length	94	70		70	62
Encounter rate per 10 km	1.76	3.62		2.64	0.48

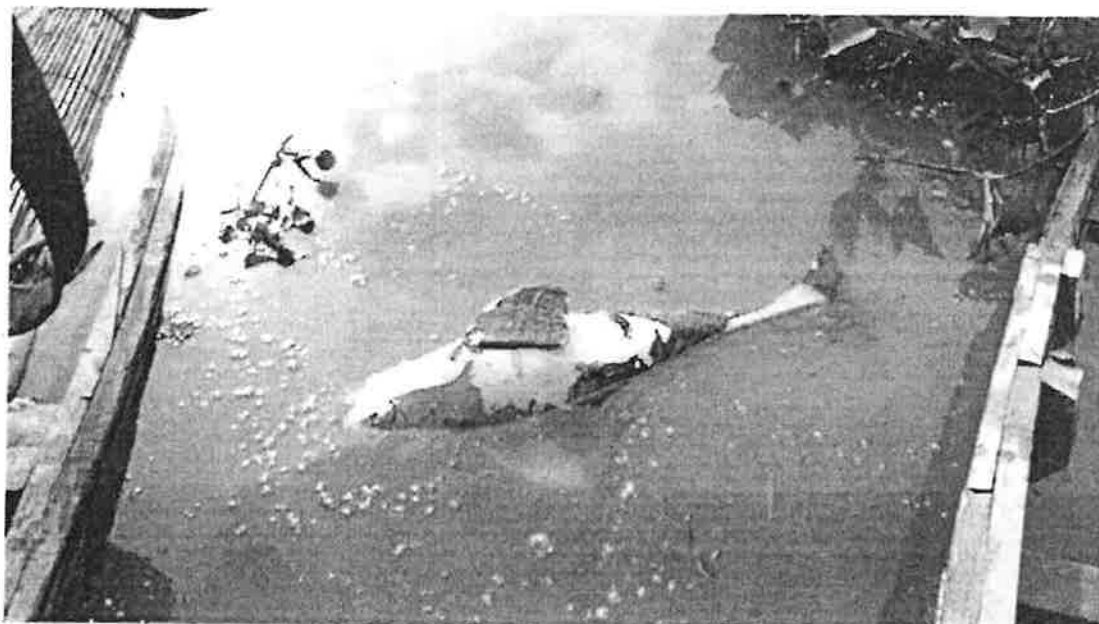


Figure 7.2 Dead Ganges river dolphin found in Maguri-Motapung beel of Tinsukia.

Dolphin death in Maguri-Motapung beel is more likely caused by oil pollution, (Figure 7.2) as all symptoms reported indicate effect of oil pollution on mammals. The observations as reported in the post-mortem report included extensive haemorrhages in gastrointestinal tract, haemorrhages and edema in lungs, haemorrhages and ventricular damages in heart, haemorrhages in stomach, intestinal lumen and liver parenchyma, congestion in kidney and brain, all indicative of severe and sudden stress by external factors.

7.2 Acoustic monitoring of dolphins

Passive acoustic monitoring (PAM) devices were used to understand occurrence and activity pattern of dolphins. C-PODs are one such underwater acoustic loggers meant for cetaceans. CPODs were deployed in river Lohit, Dibru and Maguri-Matapung beel. In Lohit River the C-POD was deployed at Guijan ghat area and in Dibru river the deployment was carried out at the confluence point of the river from 17th - 18th June 2020 and 23rd-24th June 2020, respectively. A total of 54.15 hrs of acoustic data was recorded and analysed. Multiple dolphin surfacing's were observed in the deployment area during and after the deployment and also during the surveys carried out at the river. One CPOD was deployed inside Maguri-Motapung beel area on 6th July, 2020 for 7 hrs and 15 min.

During our study period there was no detection of dolphins in our passive acoustic monitoring device (CPOD) which indicate the absence of dolphin inside the beel area during the study period. But the Maguri-Motapung beel area during the study period. But (a) the presence of dolphin in the Dibru river confluence area which was around 1.5 km downstream to the deployment site at Maguri-Motapung beel, (b) secondary information from the villagers of sighting of dolphins in beel area and (c) rescue location of dolphin carcass suggests that the beel area is frequently using by dolphins during high water periods.

Diel activity pattern-Lohit river

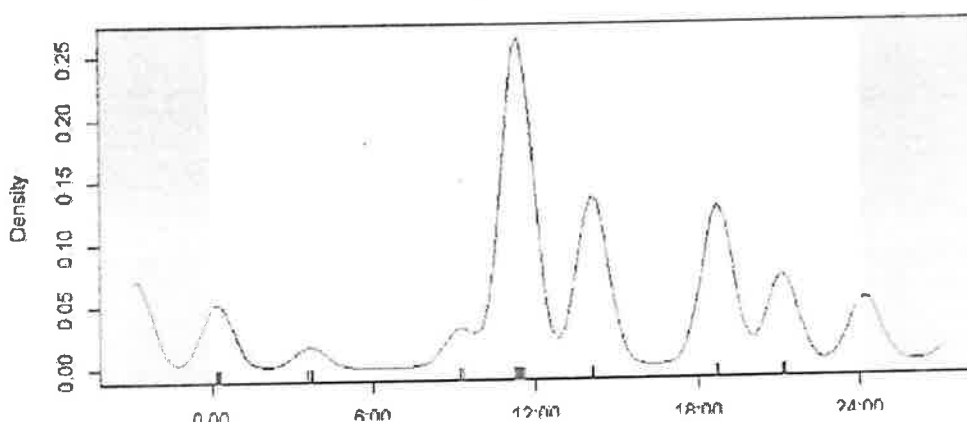


Figure 7.3 Density plot of diel activity patterns of Ganges river dolphins in Lohit river

The diel activity pattern drawn using the number of clicks detected per minute in the dolphin train shows that the dolphins are actively found in both the river Lohit and Dibru. In Lohit, recording shows sparse detections of dolphins. In Dibru, recording had more dolphin click detection than Lohit suggesting more active use of Dibru river than Lohit. The dolphins were found to be using the Dibru river throughout the day with less detection in the morning hours (Figure 7.3 & Figure 7.4). The most dominant frequency (maximum energy peak) was found to be 57.31 ± 16.01 kHz in Dibru river and 56.77 ± 11.67 kHz in Lohit river (Figure 7.6) The highest frequency usage was found in Dibru river followed by Lohit river. The frequency shows a trimodal frequency pattern. The average sound pressure level was 54.93 ± 47.94 Pa in Lohit river, 77.10 ± 53.31 Pa in Dibru river. (Figure 7.7). The maximum SPL usage by Ganges river dolphin in Dibru river was 255 Pa and in Lohit river was 254 Pa. The number of click trains were found to be more in Dibru river than lohit river (Figure 7.8).

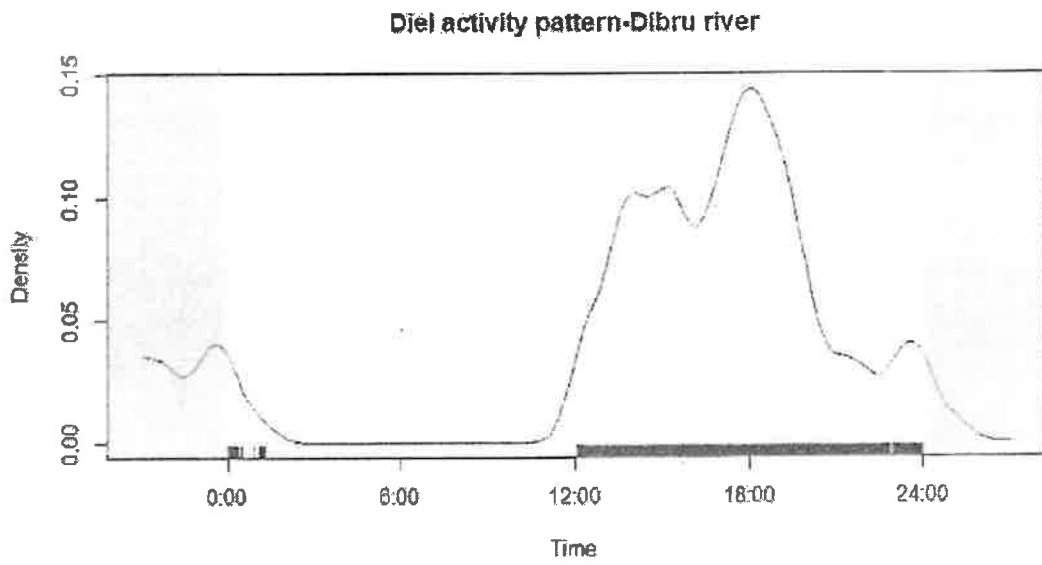


Figure 7.4 Density plot of diel activity patterns of Ganges river dolphins in Lohit river

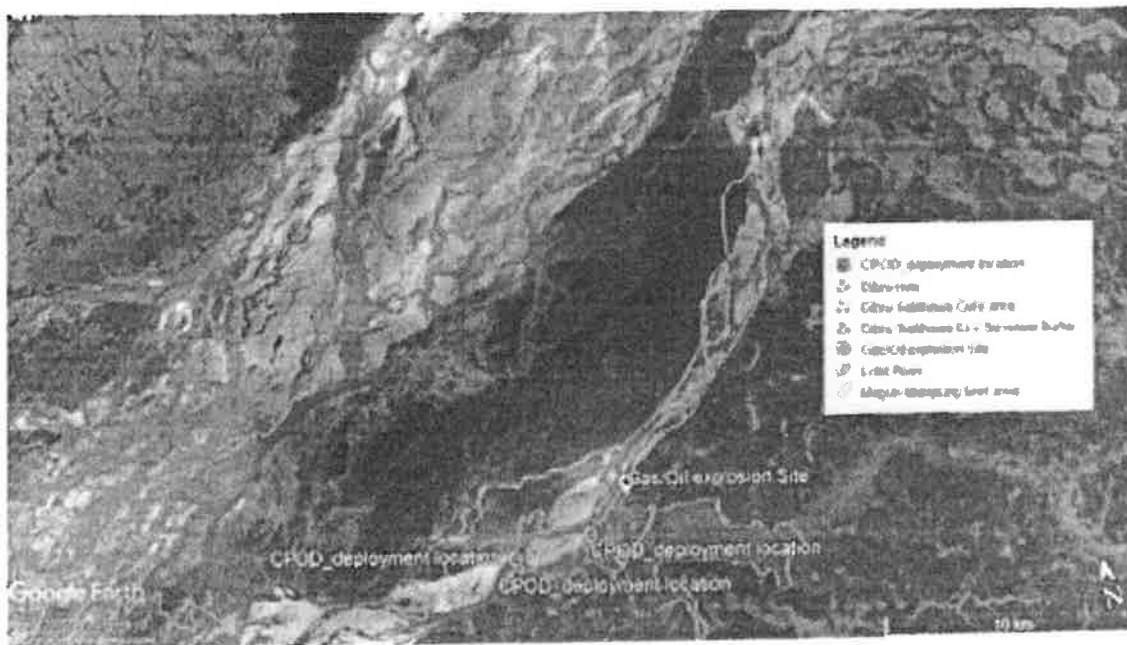


Figure 7.5 Map showing the of the location of CPOD deployment at River Lohit and Dibru area and Maguri-Motapung Beel area

The dolphins were also found using the confluence area (Dibru river deployment area) almost throughout the day (Figure 7.3). The deployment site being a confluence, with a linkage with

Maguri-Mtapung beel, make water nutrient rich attracting more fishes and in turn attracting river dolphins (Figure 7.5). Also, the Dibru river acts as a safe haven for Ganges river dolphins during the flood season with periodic migration of the dolphin into this tributary during the monsoon periods. The river Lohit is connected with Maguri beel wetland area through Dibru river. Any ecological impact in the Dibru and Lohit river or the beel will pose a major threat to the population of dolphins in this area.

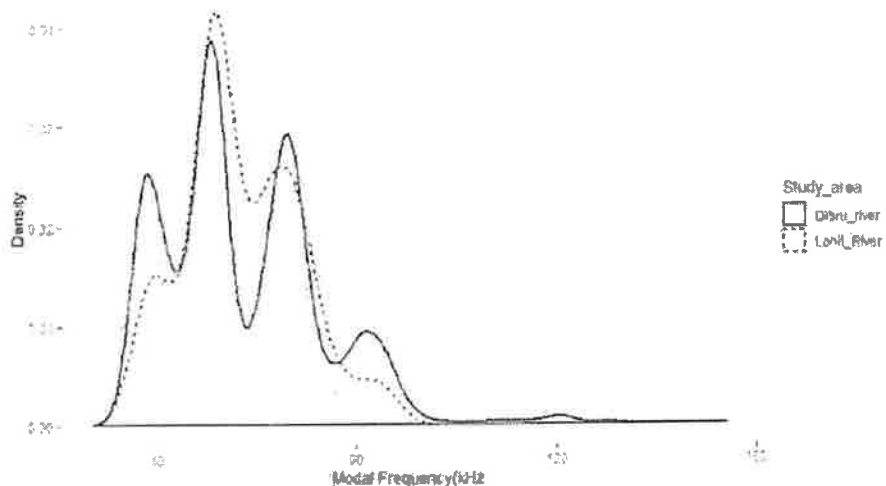


Figure 7.6 Density plot of frequency usage of Ganges river dolphin in Lohit and Dibru river

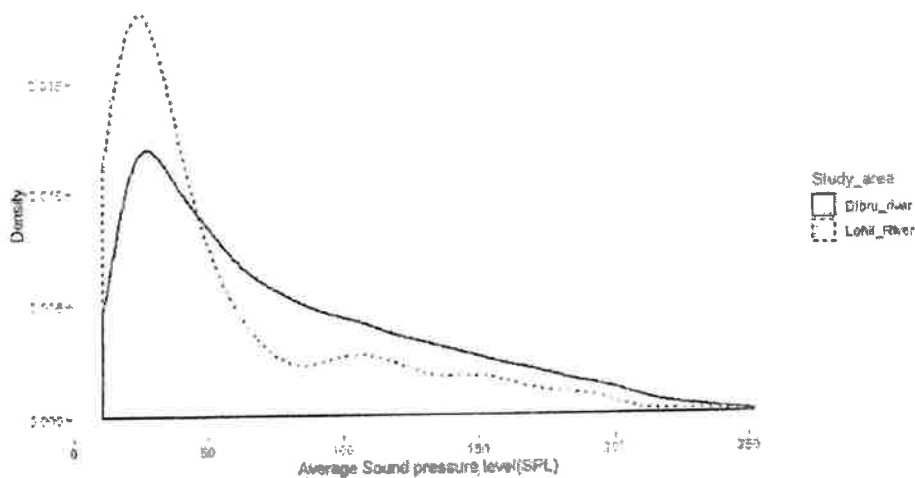


Figure 7.7 Density plot of average sound pressure level (SPL) usage of Ganges river dolphin in Lohit and Dibru river

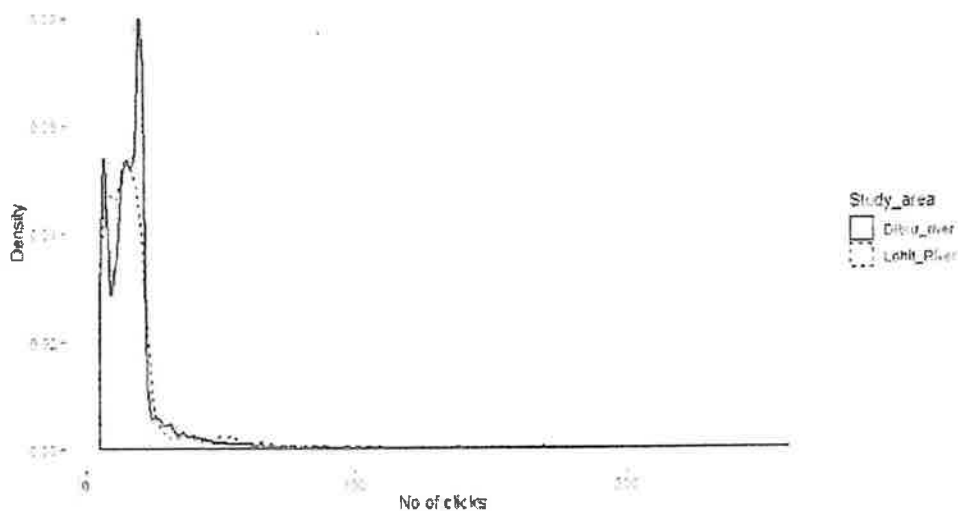


Figure 7.8 Density plot of number of clicks per train usage by Ganges river dolphin in Lohit and Dibru river

7.3 Birds

The habitat in the affected area was segregated into Grassland and wetland. Transects were walked in the grassland regions and boat transects were carried out in the wetland area between 09:00h – 14:00h. A cumulative effort of 3.48 km transect was carried out in the grasslands falling at distances of 1, 2, 4 and 5 km from the explosion site. The cumulative effort surveyed in the beel (wetland) area was 11 km.

Data from ebird was downloaded and used to draw comparisons between earlier occurrence reports at locations that fall within our sampling grid and current occurrence. Available data in our sampling regions (from 2010 onwards) are arranged according to sampled grid in Grassland and wetland. As the data had replicates of multiple days in the same locations we calculated the average of individuals sighted for each species. Incidental sightings of nest locations were recorded with its microhabitat observed. A total of 45 Species with 447 individuals were recorded in affected area (both grassland and wetland) including 213 individuals of 28 species (Appendix 4) in grassland patches (Table 7-3) and 234 individuals of 28 species in wetland area (Appendix 5 & Table 7-3). Apart from this, outside the survey, Chestnut-capped babbler, Gray-throated martin, Cinnamon Bittern and Asian Palm swift were also encountered around the beel area.

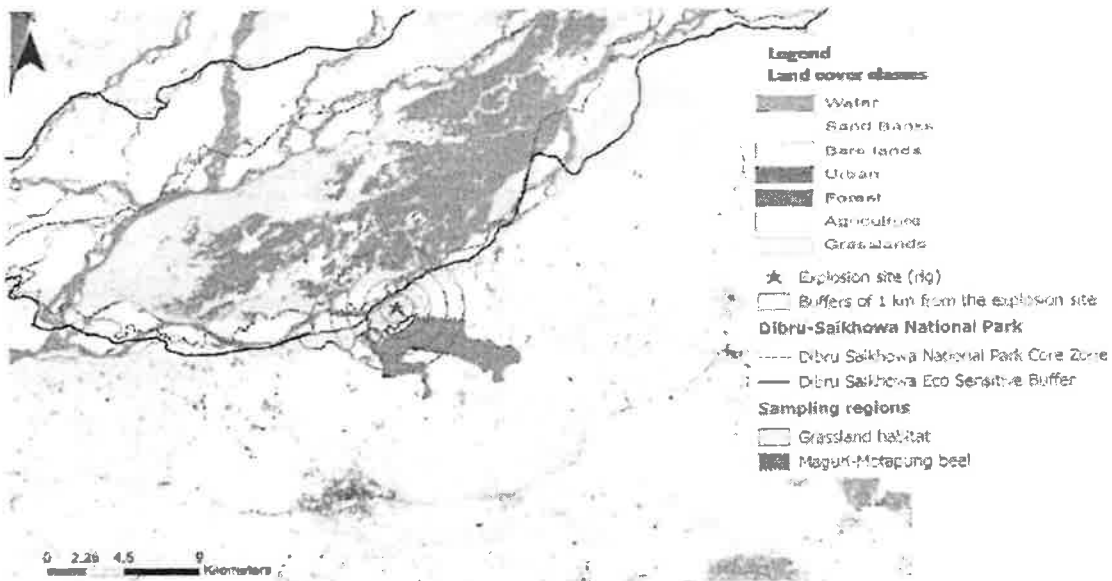


Figure 7.9 Sampling regions, concentric circles of 1km from Baghjan well no.5 (accident site).

At 1, 2, 4 and 5 km distance from the oil spill site bird species richness show increasing trend (Table 6-4 & Figure 7.10). Species accumulation curve for sampling regions (grid wise) for both habitat types are prepared with reference to the sighting time of bird species at every five minutes interval. The curve shows that the sampling effort of 70 minutes in the beel region is sufficient to achieve the asymptote for species curve. Sites close to well blowout indicate saturation of species faster in comparison to site 5 km away, indicating impact of oil spill on birds, birds seem to have left the area.

Table 7-3 Effort and counts of species obtained during the survey period in comparison to data available from e-bird

Habitat type	Distance from spill (km)	Effort (km)	Sighted by us	
			Number of Species	Number of Individuals
Grassland	1	0.9	11	49
Grassland	2	1.38	13	60
Grassland	4	0.4	8	32
Grassland	5	0.8	17	72
Wetland	Maguri-motapung	11	26	234

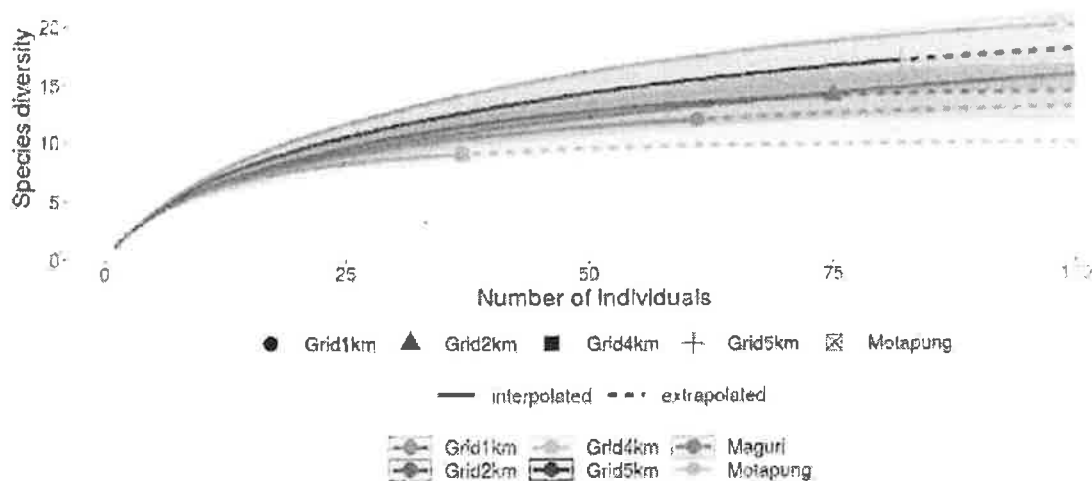


Figure 7.10 Species accumulation curve for grassland at different distances (1,2,4,5 km buffer) and wetland (Ma)

Comparison with e-bird data

A total of 335 species were recorded in the affected area (both wetland and grassland together) according to e-bird data (2010-2020). Among which, a total of 94 species are recorded in the patches of grassland that was surveyed by us. 69 species of them are resident whereas 1 is summer migrant and 21 are winter migrant (Appendix 2). 335 species of birds are recorded in Maguri-Motapung beel area according to eBird data, of which 190 are resident, 7 are summer migrant and 125 are winter migrant (Appendix 3). Collation of e-bird data across months since 2010 show that independent checklists (n=10) generated have recorded 50 bird species or less in the grassland area in the month of April and May (Figure 7.11). Plots of month wise across the year visitation bias as there are fewer checklists in May, June, July and September. However, an average close to 158 individual birds are recorded during the month of April (Figure 7.12). In the grassland patches near explosion site, we sighted 28 species of birds (Appendix 4) and 28 wetland species were sighted by us (Appendix 5) (Figure 7.15). During our survey, some of the threatened resident species, namely, Marsh babbler, Jerdon's babbler, Swamp Grass Babbler and Black-breasted Parrotbill were not encountered. The comparison indicates the birds are not utilizing the affected sites. The decline in richness is evident in grassland (59%) and wetland (85%). Survey team has recorded few abandoned nest at impact site. Its likely that birds are also

sprayed with oil spill as oil has been seen covering the vegetation in more than 2 km radius. Both oil spill as well as intense sound seems to be responsible for reduction in bird species richness and abundance.

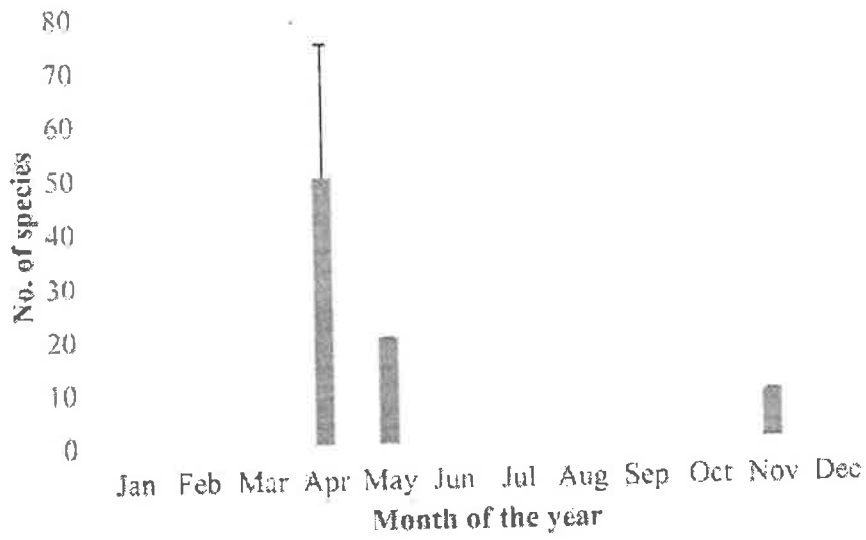


Figure 7.11 Graph showing monthly records of species richness across different months in the grassland region (checklists = 10, since 2010, source: eBird)

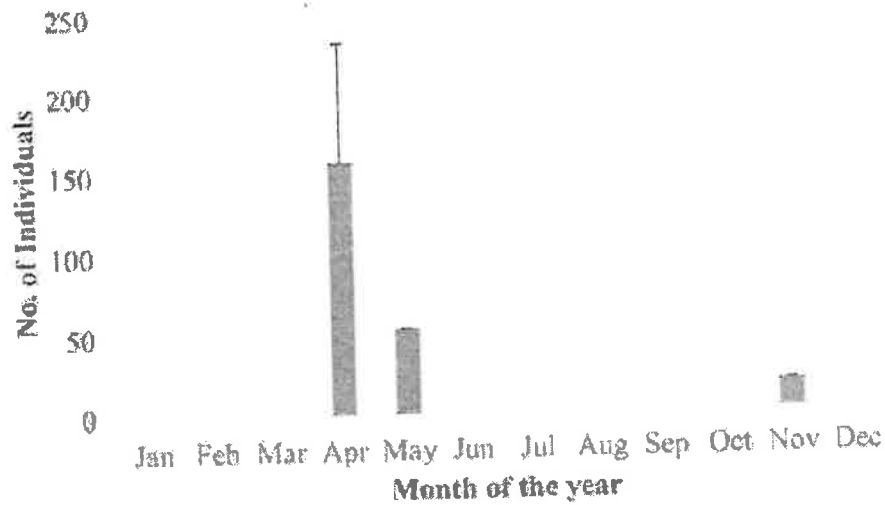


Figure 7.12 Graph showing monthly records of species abundance across different months in the grassland region (checklists = 10 since 2010, source: eBird).

In the wetland area (Magun-Motapung beel), highest of 44 species are recorded during the month of February followed by close to 43 species in March and January. An average close to 40 species of birds is recorded in the wetland area since 2010 in the month of May (Figure 7.13). Average of 263 individuals is recorded in the area in the month of April and 104 individuals in the month of May (Figure 7.14).

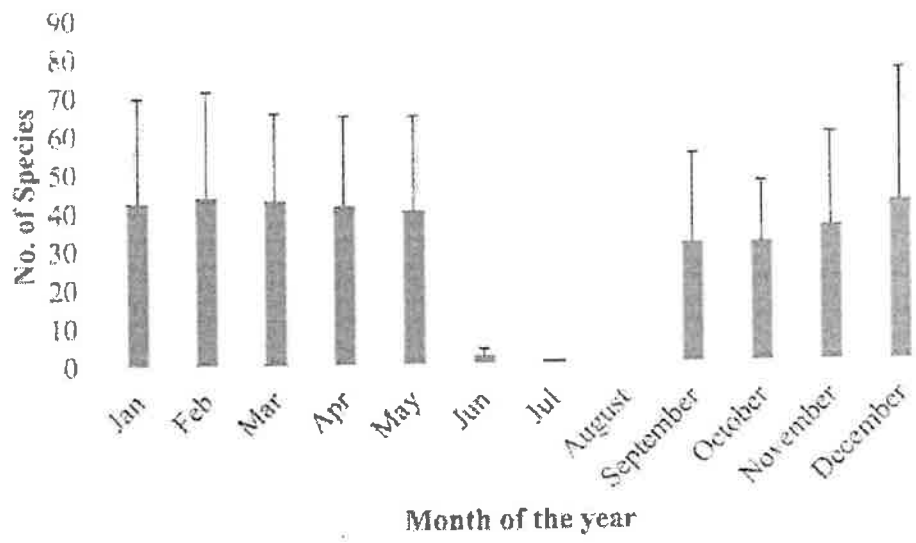


Figure 7.13 Graph showing monthly records of species richness across different months in the wetland region (checklists = 421, since 2010, source: eBird)

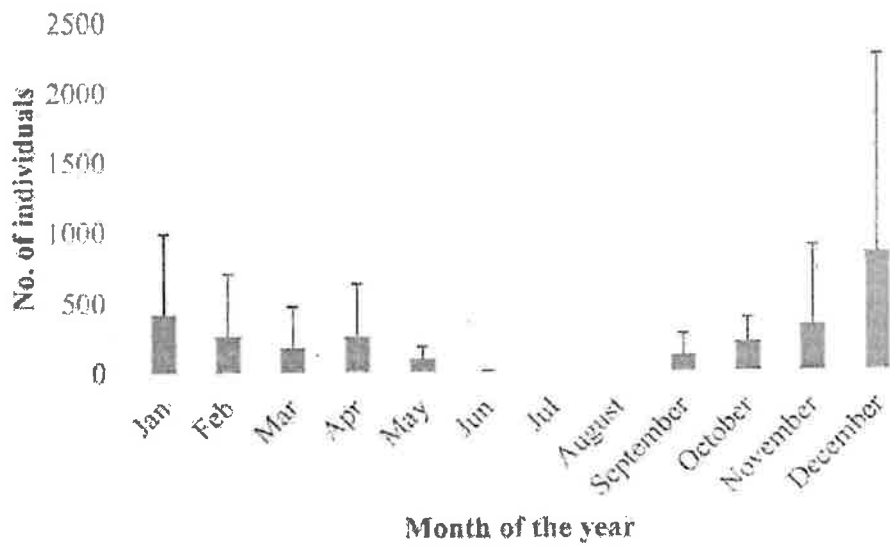


Figure 7.14 Graph showing monthly records of species abundance across different months in the wetland region (checklists =421, since 2010, source: eBird).

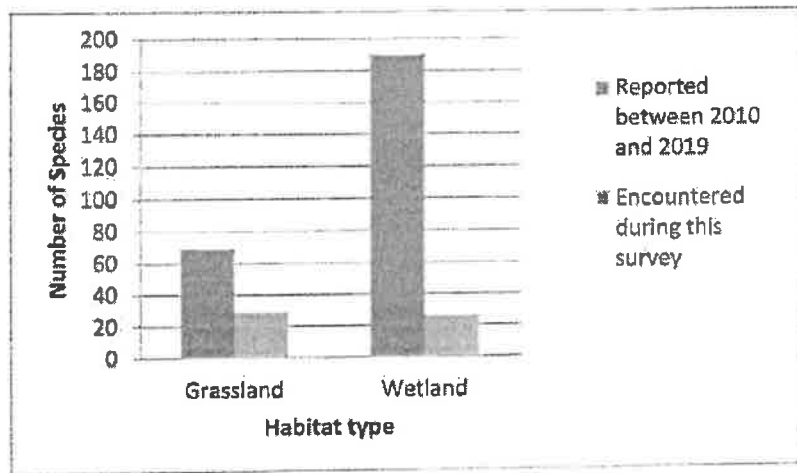


Figure 7.15 Comparison of resident species encountered in the explosion site before (from 2010-2019 from e-bird) and after explosion (during this survey).

This region is potentially also a breeding or a nesting ground for many species. During the survey, active as well as abandoned bird nests were observed and recorded (Table 7-4).

Table 7-4 Incidental sightings of nests were recorded in the sampling area in 3 locations in different microhabitats.

Sl. No.	Nest	Habitat	Location		Status
			Lat	Long	
1.	Unknown 1	<i>Bombax ceiba</i>	27.578236	95.348284	Abandoned
2.	Unknown 2	<i>Bombax ceiba</i>	27.587683	95.383187	Abandoned
3.	Red-wattled lapwing	Short grassland	27.585737	95.37803	Active (3 eggs)

Threatened wetland bird species such as Darter (Near threatened), Lesser White Fronted Goose (Endangered), Ferruginous Pochard (Near threatened), Baer's Pochard (Critically endangered) are recorded from the area. Threatened grassland species such as Marsh Babbler (Vulnerable, Restricted range), Jerdon's Babbler (Vulnerable), Swamp Grass Babbler (Endangered, restricted range) and Black Breasted Parrotbill (Vulnerable, Restricted range) are also recorded from the concerned area. Also, other threatened species like Slender-billed vulture (Critically endangered), White-rumped vulture (Critically endangered) and Swamp francolin (Vulnerable) have been reported from here (Das and Hatibaruah, 2014).

The effects of oil spill on birds are well known from many oil spills around the world from past. The overall effect of oil pollution on aquatic bird populations must be examined from two points of view: (1) the disastrous effects of oil spills and (2) the sub-lethal and indirect effects of chronic exposure to low levels of hydrocarbons in the environment (Szaro, 1976).

In a short-term study of the gulf war oil spill in 1991; during the first months more than 30,000 wintering birds were killed by oil-fouling. This represents from 22 % to more than 50 % of the regional populations of different species. Records indicate that most waders had dispersed from the affected intertidal habitats and that at least a proportion of the oil-fouled waders survived (Symens & Suhaibani, 1994).

As the sampling area is an Eco Sensitive Zone and is a suitable habitat for more than 450 species of resident and migratory birds and harbors 700 – 20000 individuals, this kind of oil explosion can be disastrous for biodiversity. A total of 56 Species with 447 individuals were recorded during sampling in affected area. The oil in the water and soil in the area might definitely harm the species we found in the area. Moreover, the temperature of the fire and the high sound level in and around the location can be very harmful for any species. The area holds many rare species of birds also which should be taken in consideration as in 2014 Baikal bush warbler (*Locustella davidi*) was recorded in Maguni beel which was its first record in India. It is also breeding season for many birds and other species and their habitat should be in suitable condition. We found 3 nests in our sampling region in different habitats. Such oil spill and fire might destroy these nests and breeding grounds for birds and other fauna. Comparison with resident birds reported on eBird with our checklists indicate severae decline in use of grasslands and wetlands (Figure 7.15).

In long term study of the Exxon Valdez oil spill it was found that species richness was significantly lower in the year of the oil spill for the same season even 1-2 year later, especially in heavily oiled bays (Wiens, Crist, Day, Murphy, & Hayward, 1996). Species richness of several guilds of birds feeding on or close to the shoreline was negatively related to initial oiling level (Wiens et al., 1996). The richness of a guild of winter visitant and resident species showed the greatest negative association with initial oiling. In winters, maguni beel also provides shelter and food to many migratory birds every year. 309 species of birds were recorded in the affected area only in the month of November, December, January, February and March according to Ebird data. In a short-term case study on Peregrine Falcons after Prestige oil spill it was found that loss of clutches during the incubation period increased significantly and was correlated with the loss of females. The polycyclic aromatic hydrocarbon concentrations in the eggs, collected from five nests after they were deserted, ranged from 21.20 ng/g to 461.08 ng/g, values which are high enough to cause the death of the embryos and poisoning of adult birds (Zuberogoitia et al., 2006).

On examining trends of marine birds in the oiled and unoled areas it was found that most taxa for which injury was previously demonstrated were not recovering (Lance, Irons, Kendall, & McDonald, 2001; McKnight et al., 2006). In a case study it was found that even after 10 years harlequin duck population had not recovered (Esler et al., 2002). Similar status was seen for the common scoter after the Sea Empress oil spill (Banks et al., 2008) were population fail to recover after a decade. Guillemots populations remained depressed at oil spilled sites (Golet et al., 2002). The reason for lack of recovery may be related to persistent oil remaining in the environment

(Lance et al., 2001). After the Prestige oil spill reproductive performance of Kentish plover was lowered by reducing egg quality. Due to petroleum oil toxicosis, Microscopically, hemosiderin deposits, related to cachexia and/or hemolytic anemia, were observed in those birds harboring oil in the intestine (Balseiro et al., 2005). Migratory birds affected by the oil spill experienced long term flight impairment and delayed arrival to breeding, wintering, or crucial stopover sites and subsequently suffered reductions in survival and reproductive success (Perez, Moye, Cacula, Dean, & Pritsos, 2017).

7.4 Fishes

Brahmaputra river system is rich in fish species due to diverse habitats, 229 species have been reported, majority of the species belong to the order Cypriniformes (114 species), followed by Siluriformes (57 species) and Perciformis (29 specie). One hundred and four species of fishes are reported from Tinsukia-Dibrugarh area (Kalita, 2016).

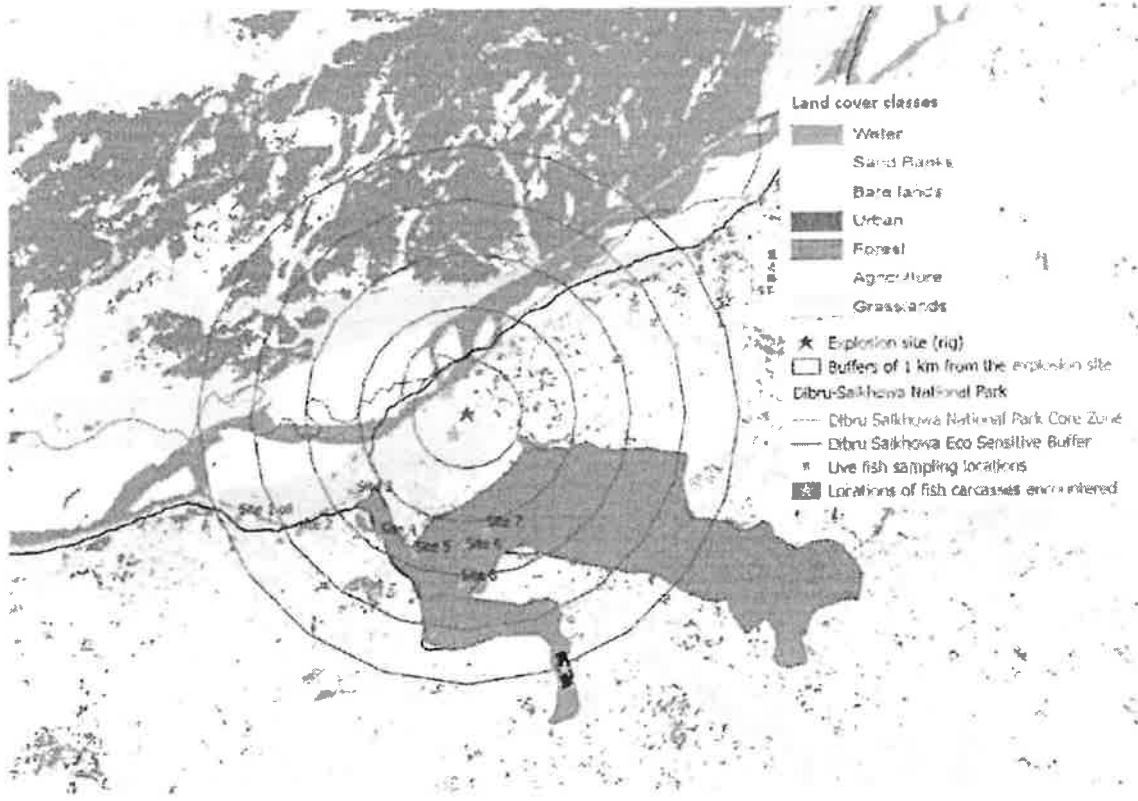


Figure 7.16 Showing Sampling sites in Dibru river and Maguri-Matapung Beel and sites where fish mortality was collected

We have recorded about 25 species of fishes belonging to 9 families. Cyprinidae family was found to be the most dominant family with 13 species.

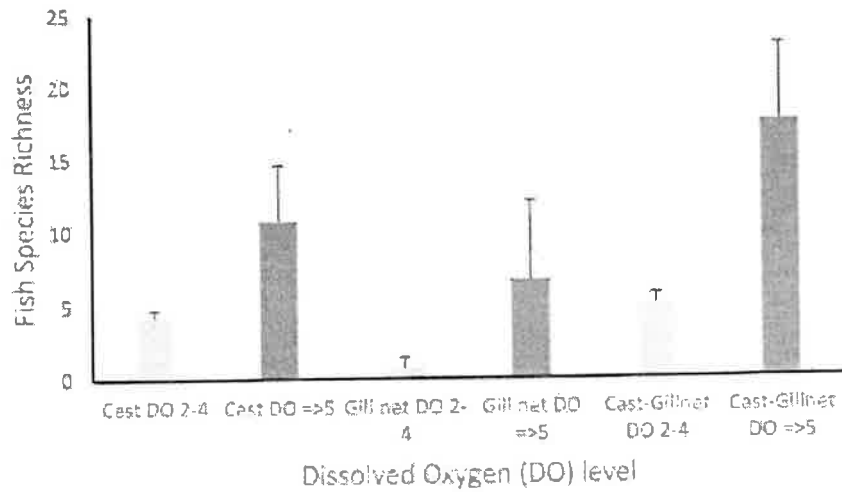


Figure 7.17 Fish species richness in two categories of Dissolved Oxygen (DO), DO between 2-4 mg/l and DO equal or more than 5 mg/l.

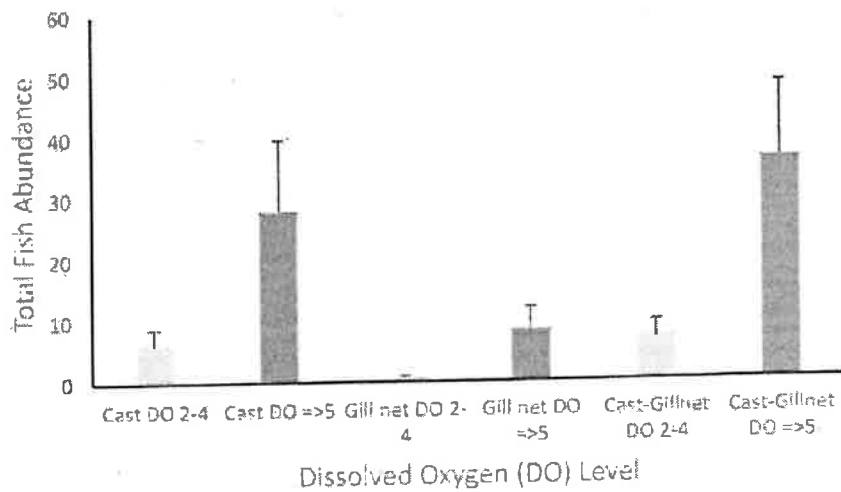


Figure 7.18 Fish species richness in two categories of Dissolved Oxygen (DO), DO between 2-4 and DO equal or more than 5

Site 1, 2, 3 (Figure 7.16) are have high abundance of fishes as they are far from oil spill sites (2 to 4 km) compared to Site 4,5,6,7,8 which are stagnant pools or slow moving water and are near wetland of Maguri beel where toxicity level is high.

These sites also have different DO levels. Fish species richness (Figure 7.17) and abundance (Figure 7.18) significantly differ in poor (DO= 2-4) and better (DO=>5) sites. Richness declines

by 71 % and abundance by 81% between poor and good DO sites. DO level differs due to oil contamination.

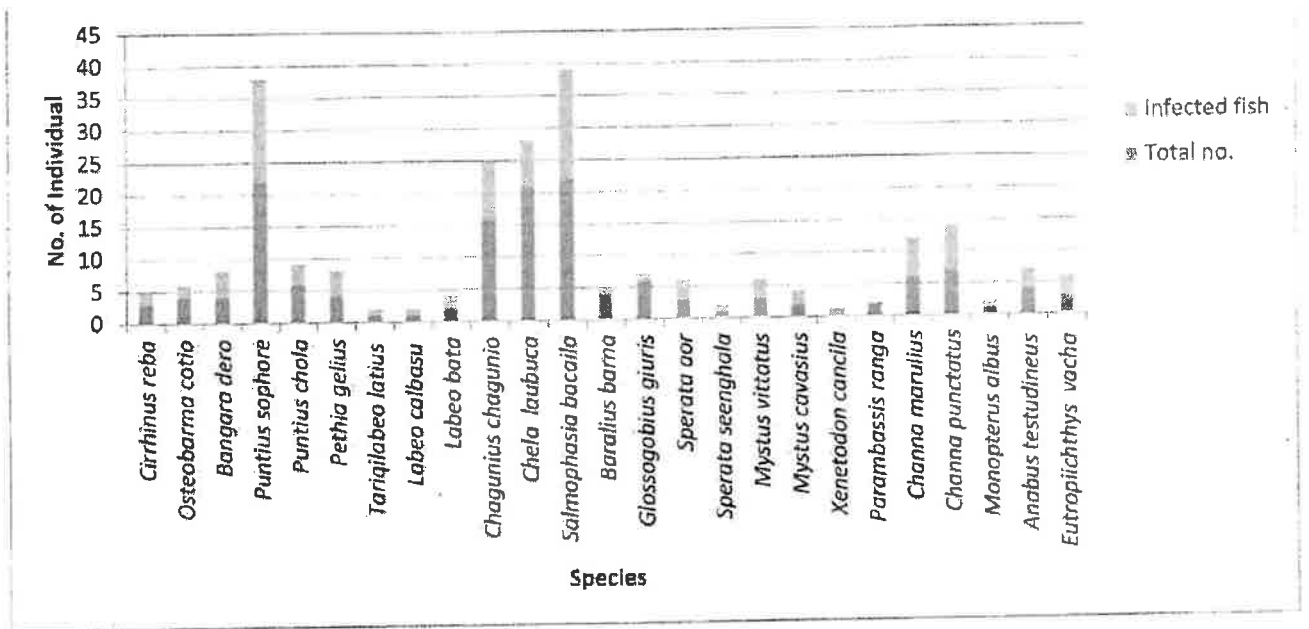


Figure 7.19 Percentage of normal and affected fishes captured from Maguri-Motapung beel and Dibru river.

Puntius sophore, *Chagunius chagunio*, *Chela laubuca*, *Salmophasia bacailo*, *Sperata aor*, *Mystus vittatus*, *Channa punctatus*, *Channa marulius*, shows high infection in fishes due to increase in toxicity and increase in heavy metals in water due to oil explosion in Dibru river and Maguri Motapung beel (Figure 7.19).

The breeding season of fishes in north-east India is from April to July and during breeding season fishes migrate uphill of the stream for breeding and therefore a significant amount of fishes were potentially affected due to explosion and continue to be affected due to the uncontained oil leak. The type of oil and the timing of the release influence the severity of oil's effects on fish. Light oils and petroleum products can cause acute toxicity in fish. Mortality in aquatic life occurs due to increased pressure, toxicity and temperature rapidly in the immediate environment. We have encountered about 30 carcasses of fish in water bodies around the explosion site. Personal communications from the locals there have suggested that there were many more dead fish earlier after the oil well blowout and they have either washed out due to flood or fished out.

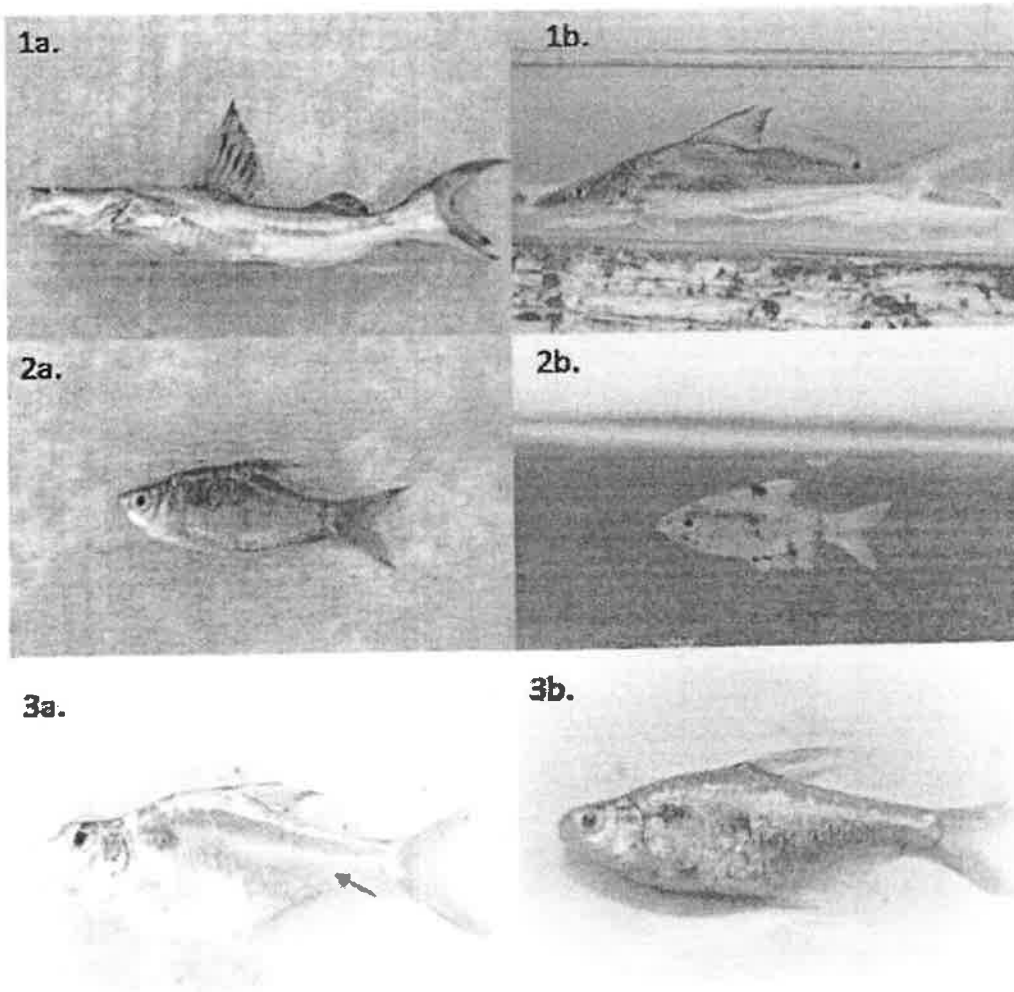


Figure 7.20 Images- Photographs of affected and normal fishes: 1a) *Spereta seengahala*, 2a) *Pethia gelius*, 3a) *Osteobrama cotio* shows effect of toxicity on body of fish which were collected from Maguri Motapung beel and Dibru river, Image 1b) *Spereta seengahala*, 2b) *Pethia gelius*, 3b) *Osteobrama cotio* are normal fishes which were captured during survey carried out in Kaziranga National Park in February 2020.

Fishes show some visible specific symptoms on body due to presence of toxicity or heavy metals in water. Fishes secrete excess amount of mucus on body for protection and breathing purpose due to decreased oxygen level in water, their body colour becomes pale and/or they lose their body scales which further leads to bleeding through body (Figure 7.20). Due to increase in toxicity or increase in heavy metals in water body there are few immediate effects which can also be observed i.e. mortality of eggs, juveniles and fingerlings stages. During our survey, maximum mortality of adult fishes had occurred in stagnant pools (Figure 7.21), as there is slow exchange of water and most of the fishes prefer stagnant pools during breeding period. Immediate loss of

riverine habitat seem to have occurred due to oil and petroleum spillage. Long-term studies have reported genetic damage to embryos resulting in morphological abnormalities which can affect ability to swim, feed, avoid predators and migrate (Incardona 2011).

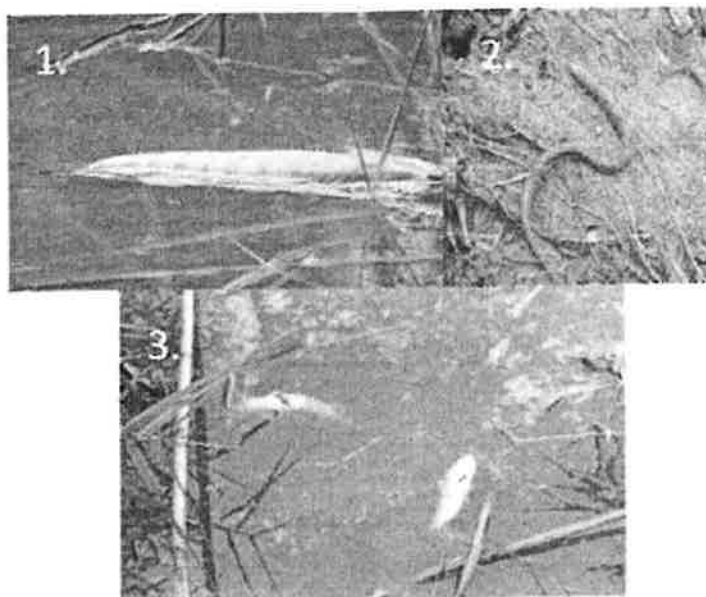


Figure 7.21 Carasses of (clockwise from upper left) 1. *Channa punctatus*, 2. *Monopterus albus* (eel), 3. *Puntius sophore* found at regions in and around the Maguri-Motapung beel

7.5 Long term effects on aquatic life from oil spill

As per our findings PAHs (Polycyclic Aromatic Hydrocarbons) are released from oil films and droplets at progressively slower rates with an increasing molecular weight, leading to greater persistence of larger PAHs. Polycyclic Aromatic Hydrocarbons (PAH) can be a slow-acting poison, and has toxic effects. The presence of PAH in water body increases heavy metal and toxicity which leads to loss of habitat and primary productivity (phytoplankton and zooplankton).

Cirrhinus reba, *Banagana dero*, *Labeo bata*, *Labeo calbasu*, *Sperata aor*, *Sperata seengala*, *Channa marulius*, *Channa punctatus*, *Eutropiichthys vacha* has high economic value in market and fishes like *Puntius sophore*, *Puntius chola*, *Pethia gelius*, *Salmophasia bacaila*, *Bardilus barna*, *Mystus vittatus*, *Xenotodon cancila*, *Anabus testudineus*, and *Parambassis ranga* are ornamentally important fishes. The abundance of these species was found to be very less in Dibru river and Maguri- Motapung beel, likely due to avoiding high toxic areas or due to the mortality that was caused by the oil spill.

The oil well blowout has certainly caused loss of riverine habitat in its surrounding regions, caused considerable mortality in fishes and livelihood of people and could have long-term impacts as well.

The type of oil and the timing of the release influence the severity of oil's effects on fish. Fish eggs and larvae are, in general, more vulnerable to oil spills than adult fish, partly due to their intrinsically higher sensitivity to oil toxicity, even to short (2 – 24 hour) exposures to 50 µg/L of the water soluble fraction of crude oil (Føyn and Serigstad 1989). Long-term exposure of fish embryos to weathered oil (3- to 5-ringed PAHs) at ppb concentrations has population consequences through indirect effects on growth, deformities, and behavior with long-term consequences on mortality and reproduction (Charles H. Peterson et al., 2003). The Exxon Valdez spill had long-lasting ecosystem impacts on neritic and pelagic habitats in Prince William Sound, causing increased mortality in developing pink salmon for several years after the spill (Rice et al., 2001).

Research spanning the past two decades has revealed a common form of injury among teleost embryos exposed to crude oil. Cardiotoxicity is generally the most sensitive phenotype, and this is primarily evident as fluid accumulation (oedema) in the pericardial space or yolk sac. This loss of circulatory function and corresponding change in morphology has been documented for several different crude oils, including Alaska North Slope, Mesa light, Iranian heavy, and Bass Strait (Couillard, 2002; Incardona et al., 2005; Jung et al., 2013; Pollino and Holdway, 2002) across a range of freshwater and marine species, including mummichog (*Fundulus heteroclitus* (Couillard, 2002)), zebrafish (*Danio rerio* (Carls et al., 2008; Incardona et al., 2005)), rainbowfish (*Melanotaenia fluviatilis* (Pollino and Holdway, 2002)), pink salmon (*Oncorhynchus gorbuscha* (Marty et al., 1997b)), and Pacific herring (*Clupea pallasii* (Carls et al., 1999; Incardona et al., 2009)). Many of the gross morphological features of the crude oil cardiac toxicity syndrome can be attributed to secondary consequences of reduced circulatory function or heart failure (Incardona et al., 2004). Chronic toxicity and stress may also reduce fecundity and survival through increased susceptibility to predation, parasite infestation, and zoonotic diseases. The frequency of a single symptom does not necessarily reflect the effects of oil on the organism, so the cumulative effects of all symptoms of toxicity must be considered in evaluating acute and chronic effects of oil on fish (Heintz et al., 2000). Contaminant exposure can make a spawning site unavailable for multiple generations if the oil is detectable by the fish. (Cheung et al., 2009).

The overall impact of oil spill recorded following impacts; mortality of eggs and immature stages, effects on organs, tissues and gills, physiological dysfunction, stress and altered respiration, irregular or reduced heart rate, fluid accumulation, effect on swimming, feeding, reproductive and migratory behaviours genetic damage to embryos resulting in morphological abnormalities, displacement of individuals or portions of a population from preferred habitat (Nahrgang et al., 2010; Boertmann, Mosbech, and Johansen, 1998; Jonsson et al., 2010; Pearson, Woodruff, and Sugarman, 1984). Pinto, Pearson, and Anderson, 1984; Moles and Wade, 2001; Heintz et al., 2000; Christiansen and George, 1995; Mahon, Addison, and Willis, 1987; Ott, Peterson, and Rice, 2001; Rice et al., 2000; Carls, Harris, and Rice, 2004; Short et al., 2004; Peterson et al., 2003)

7.6 Butterflies and odonates

For butterfly sampling a team of one observer and a recorder surveyed the designated grid for a pre-determined time of 20 minutes between 0900h to 1400h. Between two spatial sets of the time-constrained survey, a checklist of species sighted was generated at a point between the two spatial sets. A time constrained survey of three spatially independent sets of 20 minutes each were carried out in one of the grids (2 km from the rig, short-tall grassland interspersed with water puddles) for sampling odonates. The dragonflies and damselflies were photographed in the field and sometimes caught with a net and released without harming the individual after identification. A checklist was generated of species encountered between the spatial sets.

A total of 96 individuals belonging to 41 species of butterflies have been sighted from both the time constrained survey and the checklist generated at the sampled point (Appendix 7). The number of individuals sighted appears to linearly increase from the site of explosion until 5 km in the regions sampled (Figure 7.22). Species accumulation curve for 5 mins show that grids closer to the explosion site saturated earlier than the grids away from the explosion site (Figure 7.23). The habitats of all the grids sampled were similar; grids at 1km, 2km, 4km and 5km were short grassland, short-tall grassland, tall grassland-shrubland and short grassland-Agriculture, respectively. Our survey team has found carcasses of burnt odonates as well as live ones with oil film on wings

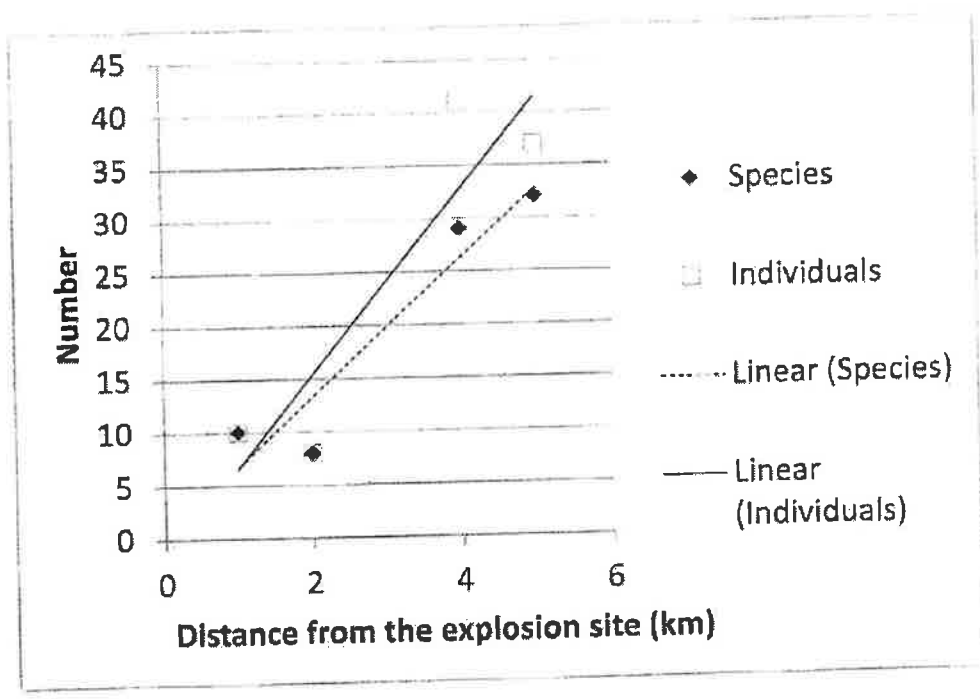


Figure 7.22 Species and number of butterflies encountered at varying distances from the explosion site

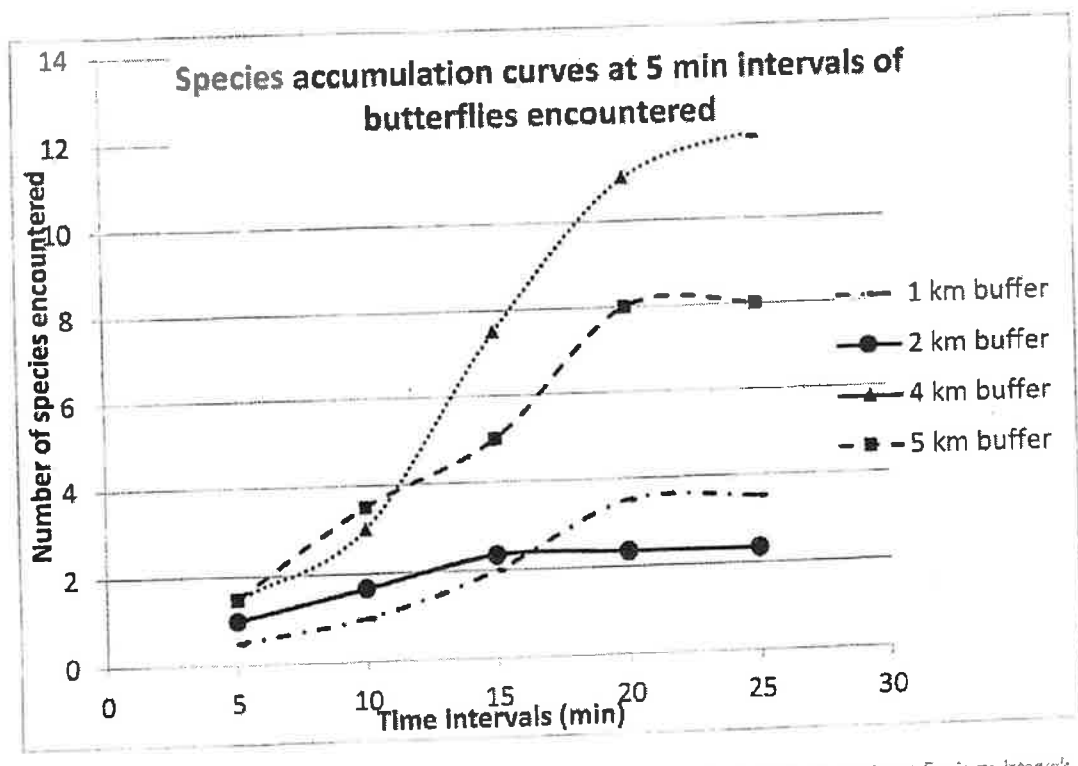


Figure 7.23 Species and number of butterflies encountered at varying distances from the explosion site at 5 minute intervals

A total of 34 individuals of 13 species of odonates were sighted during the survey (Appendix 8), and the IUCN status of all the species are Least Concern. Personal observations on field revealed the presence of oil film on wings of green marsh hawk and ditch jewel dragonfly and a carcass of a scarlet skimmer species with oil film on wings (Figure 7.24) were found.

The butterflies are very sensitive to minute changes in the ecosystem. Though the studies on impacts of oil spill on butterflies have been highly neglected, it may have direct or indirect effects on the population of butterflies. Different species prefer specific plant species as their host plants. The blowout and explosion resulted in severe damage to the vegetation of surrounding area including several host plants of butterflies. This may affect the oviposition, larval and pupal stages of butterflies. We also encountered several dead specimens of butterflies during our survey. In the area we surveyed, three species which are protected under Schedule II of the Wildlife (Protection) Act, 1972, are found, shows the importance of the area for butterfly conservation. However, to know the extent of effect of the incident on butterflies and their host plants short term and long-term impact assessment studies are needed in the area.



Figure 7.24 Carcass of scarlet skimmer with visible coating of oil on the wings

The dragonfly and damselfly spend the larval stages in water. A minute change in the water bodies can have effects on the eggs and larva of dragonflies and damselflies. Due to oil deposition in

water the eggs, larva and nymphs will get damaged, therefore effecting the odonate population in the area. Meland et al. (2019) found the damage of DNA in dragonfly nymph in the roadside ponds where sedimentation of polycyclic aromatic hydrocarbons (PAHs), alkylated PAHs and metals were encountered. Again, due to low DO level in the water bodies in the area the prey population of the odonates like fish fingerlings, tadpoles and other aquatic insects got affected. However, to understand the extent of impacts of the blowout and explosion both short term and long term impact assessment studies are needed.

The number of studies dealing with the effects of oil spill on insects are very low. The adverse impacts of petroleum and petroleum-derived substances on terrestrial insects and spiders have been confirmed in a few studies (Blakely et al. 2002; Rusin and Gospodarek 2016). Direct exposure to oil is known to negatively affect insects by altering different functions such as feeding and oviposition behaviour, gas exchange, cuticle permeability and cell membrane structural and functional destruction (Beattie et al. 1995; Mensah et al. 1995; Bogran et al. 2006). The successful use of crude oil sprays in traditional integrated pest management programme to control butterfly and moth (Beattie et al. 1995, Mensah et al. 1995) indicates the potential of the negative effect that oil spills can have on Lepidoptera in contaminated areas. There is much that we don't know about the extent of effect oil spills can have on butterflies which warrants short term and long term impact assessment studies.

7.7 Herpetofauna

A time-constrained area search method was employed for sampling herpetofauna in each of the four grids (1 km, 2 km, 4 km and 5 km) for a pre-determined time of one hour. The sampling was carried out by active searches underneath logs, leaf litters etc. for presence of animals by 1-2 independent observers within the grid. The searches will be targeting potential regions for encountering common herpetofaunal group, namely skinks, agamids, geckos, snakes, chelonians, frogs and toads. This area has reported to have 17 amphibian, 13 turtle, 11 snakes and 8 lizard species (Appendix 9, 10 & 11)

A cumulative effort of 5.5 km was carried out in the four grids actively searching for the presence of any herpetofauna of any life stages. A total of 4 individuals of house geckos (*Hemidactylus* sp.) were found in one of the grids, herpetofauna were not encountered in any of the other grids. However, supplementary observations (opportunistic) of 9 species of reptiles were encountered in other locations (Figure 7.25 & Appendix 10 & 11). The microhabitat of all the herpetofauna

found, including those found in the grid was human-habitation that had not burnt (Figure 7.25). Reports of *Euphlyctis cyanophlyctis* (Common skittering frog) in beel in 2018 is reported (iNaturalist, 2018). Though this one is a common species widely distributed across waters of different quality, not an individual was found in the regions sampled. A species thought to be extinct in wild was also rescued in a tea estate close by, the black soft-shell turtle *Nilssonina nigricans* (news report by Mubina Akhtar, 2020). There are also reports of the river banks of Dibru-Saikhowa National Park harbouring endangered species of turtles and also possibly their breeding. Some of these include the endangered *Chitra indica* (Gray, 1831), an endangered and a rarely sighted species, *Nilssonina gangeticus* (Cuvier, 1825), a vulnerable and a frequently traded species, *Cuora amboinensis* (Daudin, 1802), a vulnerable and a declining species with this National Park being one of the strong holds of the wild population, *Cyclemys gemeli* Fritz, Guicking, Auer, Sommer, Wink and Hundsdoerfer, 2008, *Pangshura tecta* (Gray, 1831), *Pangshura tentoria* (Gray, 1834), a not evaluated and a poorly known species, *Pangshura sylhetensis* (Jerdon, 1870), an endangered and a protected species and *Melanochelys tricarinata* (Blyth, 1856), a vulnerable species whose populations are restricted to protected areas (Ahmed and Das, 2010).

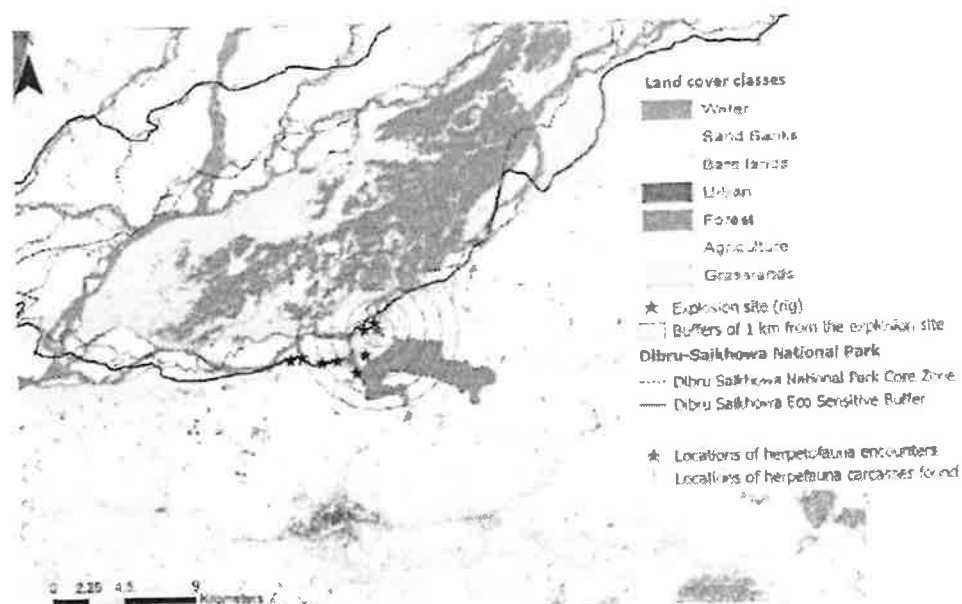


Figure 7.25 Location of herpetofauna opportunistic encounters (both live and carcasses) during the survey period (02/06/2020 – 07/07/2020) (details of the herpetofauna are given in Appendix 9, 10 & 11)

We have found live herpetofauna from 500 m, up to 6 km from the oil well explosion site and carcasses at 400 m to 6 km; the former was found burnt while the latter drowned due to reasons unknown. The lack of any encounters of tadpoles in the multiple water pools that were encountered in the grids, despite being breeding season for many species, is a great concern. Though this time of the year in a flood-prone season makes it difficult to discern whether the cause of apparent wipe out of herpetofauna is floods or the explosion, the direct impacts of explosion through burn down is certain for at least 500 m, and impacts of oil spill remains a crucial component to answer. The survey was restricted to daylight only as flooding and lockdown of site after fire created night sampling issues. The checklist is partial and list of Ahmad and Das (2020, Appendix 10 & 11) provides what will be expected in this area.

Besides, the extent of damage, oil spill can have both short term and long term impacts on herpetofauna. On 9th December 2014, a severe oil spill incident that occurred in the mangrove ecosystems of Sundarbans and caused death of several water monitors (Mijanur and Iliazovic, 2016). Evidences of PAH (polycyclic aromatic hydrocarbons), have been found in the gut, liver and kidney of sea snakes suggesting possibilities of PAHs being circulated in the marine food chain (Mote et al., 2015). Similarly, toxics can slow tadpole response times or swimming ability, making them more vulnerable to predators and less able to find food. Contaminants can also interfere with sexual development, reproduction, and thyroid functioning, which may cause tadpoles to

grow but not undergo metamorphosis. They can also impair immune functions, making tadpoles or juvenile frogs more vulnerable to disease (Sparling et al., 2010). Amphibians are one of the sensitive taxa, especially their skin with many also having cutaneous respiration. Any oil film that covers the skin is likely to cause a reduction in their respiration rates. Similarly, reptiles already suffer from lack of large scale data (40 % remain not evaluated by the IUCN with 16% of the evaluated ones stand as Data Deficient, IUCN, 2017) and communal myths and illegal trade that threaten their lives across India. There are few habitats where the diversity and populations of herpetofauna can flourish. Preserving these habitats is imperative to retaining our biodiversity value. Dibru-Saikhowa Biosphere Reserve that includes the core zone of the National Park and the Maguri-Motapung beel is recognized for the same purpose. Any potential hazards in this region threatens one of the strong holds of population of at least 9 species of chelonians (turtles and tortoises; Ahmed and Das, 2010), among the 42 species of reptiles and 17 species of amphibians that inhabit this region (Nongmaithem et al., 2016)(Appendix 9, 10 & 11). This sums up to one twelfth of reptilian species found in India. We suggest considering abatement of hazards that will potentially threaten the efforts that are being made to conserve the biodiversity in these regions. This holds true especially for oil well blowout, though at times accidental and at times due to negligence of appropriate hazard management strategies that not only have a short term impact but a long term and a far reaching impact. Flood prone regions, like our region of interest, the Dibru-Saikhowa Biosphere Reserve, could spread the oil spill at far distances through the running water that can have a devastating impact kilometers away from the actual site of oil well blowout.

7.8 People

We have not done any work on socio-economics and health impacts on humans. The oil well blow out had economic and health impact on humans (Rishu Kalantri 2020, thelogicalindian.com). The contaminants will have long term impact on human health, which need to be assessed properly and need appropriate mitigation measures.

8 Conclusion

The area around the spill over is of high biodiversity value. The spill has resulted in mass mortality and severely impacting the environmental condition resulting in debilitating conditions for species to survive. The toxic fumes and oil coating has universally affected flora and fauna. The contaminants and oil continue to be released in surrounding areas and immediate steps are needed to contain this spill over. The toxins released are known to have long-term persistence in soils and sediments, which will not only affect current life conditions, but due to sustained release over a long period, pose a serious health risk for a longer term.

There are two major issues with companies operating oil and gas wells in Assam, a) Management of oil spills from their wells, and b) emergency response readiness and effectiveness in terms of major accidents. The oil leakage is a chronic problem and leaching of oil in water and underground have ecological and health cost. As has been observed in the case of several wells across Eastern Assam. As far as major accidents like well blowout in Assam the entire focus is on closure of well and no restorative process is put in place for remediation of effect of oil in terrestrial or aquatic system.

Two oil well blow outs earlier occurred in Assam, Dikom (Gogoi et al., 2007) and Naharkatia-Deohal (Lahiri et al., 2012). We are unable to get any meaningful information about restoration of surrounding area. Same looks like the case in Baghjan with no effort to engage experts for remediation due to oil spill. OIL does not have any information on their website nor they provided information about their emergency plans as to how to deal with leaks and blowouts and restoration plans in case of oil spill

The evaluation of landscape and biodiversity indicate large-scale impact of oil spill on flora and fauna. Our evaluation indicates much higher level of PAHs pollutants some of which are carcinogenic are in the ecosystem. Excessive noise level, produced by the blowout is detrimental to animal and human health. Impact of sound may be taken care after plugging. Effect of PAHs are going to be there in ecosystem for long term. Decline in Ganges dolphin use of this area, as well as death of one dolphin, mortality of fishes, insects, herpetofauna, birds and impact on health of most of the animals are related to oil spill and well blowout. Humans in this area are also impacted. Decline in mammals, birds, insects and herpetofauna will take time and restorative efforts are needed to regain to former diversity levels. Vegetation in large area is sprayed with oil due to blow out and have impacted the landscape.

Given the fragility and seismicity of the landscape, the impact of the oil blow out, and importance along with the uniqueness of biodiversity existing in the area, following needs to be done for safeguarding this landscape:

- 1) The potential of oil blow out and oil spill like disaster like this a reality and therefore such oil wells in the vicinity of Dibru-Saikhowa National park and IBA complex (Maguri and Motapung, Poba Reserve Forest, Kobo chaponi, Amarpur chaponi and) will be detrimental to the conservation value of this unique ecosystem. Due consideration needs to be given to this threat for future development.
- 2) More than 25 wells (Dibru-Saikhowa ESZ notification) are planned and almost same number exist in this conservation complex/s (Dibru-Saikhowa National Park, Bherjan Wildlife Sanctuary, Padumani Wildlife Sanctuary and Borajan Wildlife Sanctuary, Important Bird Areas (IBA) Poba Reserve Forest, Kobo chaponi, Amarpur chaponi and Maguri and Motapung, Dihing-Patkai Wildlife Sanctuary) needs to be re-evaluated for their cumulative impact on biodiversity value of this landscape.
- 3) Safety audit for all other wells currently operating or planned need to be done. Risk management study need to be done to ensure appropriate risk mitigation strategies. Detail management plan needs to be developed for safety measures and dealing with oil leakage.
- 4) Observing the ecological disaster caused by this incident, the proposed oil exploration and development in Mechaki, Mechaki extension, Baghjan and Tinsukia Extension PML (MoEFCC EC dated 9th April, 2020) needs to be reassessed, since this is the habitat of Critically Endangered species of this region.
- 5) OIL should have dedicated team and advanced training of their personnel to deal with emergencies arising out of leakage, blow out and any other accidents which is possible due to extraction, transportation and storage of highly volatile and risky chemicals.
- 6) Adequate finances should be for all restorative work in Wildlife areas Protected or otherwise and compensate local people for their losses. There should be annual payment to Forest Department for restoration and subsequently for management of this conservation complex. Adequate consultation by Forest Department should be done to involve experts in the field of Oil spill remediation and restoration.
- 7) A long term study should be initiated to understand the long-term impact of this oil spill and blowout impact on the ecology and environment of Maguri-Motapung beel and Dibru-Saikhowa National Park as well as on the health and socio-economic conditions of local communities

around the affected areas. Impact of the oil spill on the livelihood of local communities especially on ecotourism based on Maguri-Motapung beel and Dibru-Saikhowa National Park needs to be assessed.

- 8) Restoration will be long-term process and appropriate committee should be formed to develop, monitor and guide the process.

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9 Methods in detail

9.1 Measuring change: River morphology

Geomorphology helps in understanding the relationship between river forms and processes, water and sediment fluxes, ecosystem and habitat relationships. This data along with land cover changes is used to understand the changes in river morphology. Due to changes in the rivers this national park has become an island (Figure 2.1). River transects were done to assess change in sand deposition rates. As the river morphology changes have occurred around 1993 to 2005 the study considers landcover data from the years 1985, 1995, 2005 and 2019-20 to measure these quantitatively.

Land use and land cover (LULC) have 19-classes, sourced from Earth Data repository DAAC. These datasets are for India and are of time periods 1985, 1995, 2005, 2019-20. These maps were derived using Landsat 4 and 5 Thematic Mapper (TM) for 1985, Enhanced Thematic Mapper Plus (ETM+), and Multispectral (MSS) data for 1995, India Remote Sensing satellites (IRS) data for 2005 and 2019-20. The data were classified according to the International Geosphere-Biosphere Programme (IGBP) classification scheme. In this study we aggregated 19 classes into 4 classes as we are looking for changes in river morphology, Waterbodies, Vegetation, Urban and other.

9.2 Channel shift rate:

From the land cover maps all the surface water bodies are extracted and channels are separated from this data and then for each time period channel shift rate is calculated using the formula given below.

$$rate = \forall i \in (1, n) (w_1 \cap g_i, w_2 \cap g_i) / (t_2 - t_1)$$

where g is the set of grids, t represents the time and w represents the surface water.

The area is divided into grids and for each grid channel shift rate is calculated. Displacement is calculated from the shift of channel from one time period to another. It is observed that the shift rates are more towards the Himalayan foothills and are ranging from 0 to 240 per year. To understand the impact of sand deposits we have integrated this information with geological information to derive braiding index.

9.3 Braiding Index

The Brahmaputra River flows along the alluvial valley as a wide braided river. Braiding also happens in tributaries of Brahmaputra in Assam plains. The width of the river varies with time along its course. The braiding intensity of this river is estimated using the braiding index (BI) of Brice (1964). River width is extracted from land cover data. River transects are done to assess sand bars formed along the river and then the ratio of that with the length of the river is found to derive the braiding index.

Also it is observed that channel width has a positive correlation with braiding index and so there is an increase in the index value with the increase in channel width.

$$\text{Braiding Index} = 2 (LI)/L, \text{ Where}$$

Li = sum of the length of the braid bars and islands in a particular segment of the river

L = length of the course of the river in that particular segment.

The river transects are done for every grid to understand the silt deposits and water flow. This output is used in deriving the braiding index across the region.

9.4 Measuring pollution levels using geospatial methods

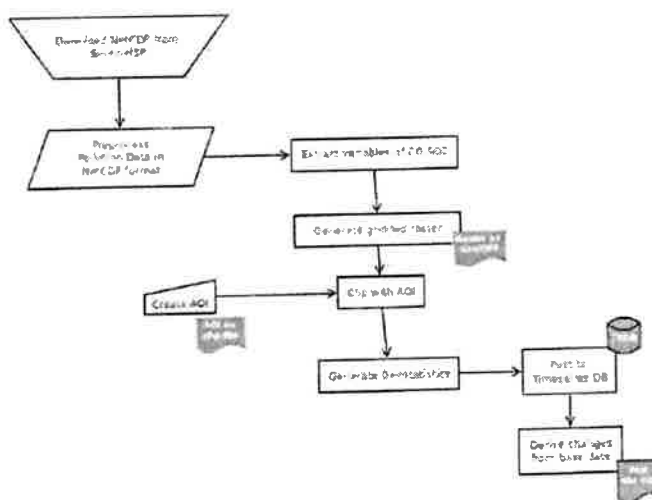


Figure 9.1 Flow diagram shows the process of deriving the geostatistics for the pollution levels.

To measure the pollution levels European Space Association's Sentinel 5 precursor satellite is used (Figure 9.1). This satellite is specifically launched to monitor air quality with high temporal

resolution. There are several products available in Sentinel 5P mission to understand and quantitatively assess air quality. NO₂, SO₂, CH₄, CO are all available for different scenarios. In this particular case to understand the impact of oil spill blow out Carbon monoxide(CO), Sulphur Dioxide (SO₂) and HCHO (formaldehyde) product is used. TROPOMI instrument gives product at a spatial resolution of 7 km by 3.5 km which is fairly good to estimate impact of pollution at regional level. This data is accessed from sentinel Copernicus openhub. The data comes in NetCDF format and SNAP tool of ESA is used to convert the product to a raster to extract the required information. Data before the blow out and after the blow out are taken to check the levels in Tinsukia. Extraction at small scale is challenging in terms of picking localized changes.

Pollution level is calculated using following formula

$$P(t) = \forall g \in G, \max(DN(\cap_i^n (g_i \cap bbox)))$$

Where P(t) = pollution at time t

G = set of raster grids and bbox is the referenced envelope of the area of interest.

In this case study we have used EPSG:4326 for map projections.

Once pollution level is calculated, percentage change is calculated using the formula below

$$\delta_t = 100 * (P(t) - P(1)/P(1))$$

These delta values are plotted to observe the variations in CO and SO₂ levels.

9.5 Impact on land surface temperature

Landsat and MODIS LST product is used to make some observations. Both morning and night temperatures are captured by MODIS Aqua and Terra satellites which provide better picture of the variations.

9.6 River and Wetland Pollution mapping

For mapping oil pollution Sentinel 1 SAR was used (Ozigis et al 2018) as it can penetrate clouds and detect changes in the land surfaces.

9.7 Pollution – water quality

The primary objective of this study was to estimate the overall toxic effect of 16 PAHs compounds [Naphthalene (NaP), Acenaphthylene (Acpy), Acenaphthene (Acp), Fluorene (Fl), Phenanthrene (Phe), Anthracene (Ant), Fluoranthene (Flu), Pyrene (Pyr), Benz[a]anthracene (BaA), Chrysene (Chr), Benzo[b]fluoranthene (BbF), Benzo[k]fluoranthene (BkF), Benz[a]pyrene (BaP), Dibenzo[a,h]anthracene (DbA), Benzo[g,h,i]perylene (BghiP), Indeno[1,2,3-cd] pyrene (InP)] in the aquatic ecosystem of the impacted area.

A detailed sampling was conducted to evaluate the impact of oil blowout and a total of 29 samples, including water (n – 12), sediments (n – 12) and fishes (n – 5) were collected from the highly impacted area of the Maguri-Motapung wetland, Dibru and Lohit river. The blubber sample (n - 2) of endangered Gangetic dolphin was also collected from the carcass of dolphin found in Maguri-Motapung wetland. Water samples (1 lit) at each sampling point were collected into pre-cleaned sterilized amber HDPE (High Density Polyethylene) bottles from the Maguri-Motapung wetland and from the main channel of Lohit and Dibru rivers. Waterbed sediments (100 gm) were grabbed in sampling container from the bottom and banks of the river and wetlands where fine-textured substrate had accumulated. Dead fish samples (n - 5) of five different species, namely *Mystus Vittatus*, *Channa orientalis*, *Rosbora daniconus*, *Puntius Sophe* and *Eutropiichthys vacha* were collected from the two sites (Maguri—Motapung wetland and Lohit river). After sampling, all collected samples (water, sediment, fish & blubber) were immediately stored in an ice-chest at 4°C and transported to the Shriram Institute of Industrial Research, New Delhi (accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL), a constituent board of Quality Council of India (QCI) as per ISO/IEC: 17025 in the field of testing) for laboratory analysis. PAHs content in water, sediment and fish tissues was analysed by using Gas Chromatography (GC-FID) and validated and confirmed by GC-MS/MS.

To assess the presence and extent of oil spill, the contaminated water and sediment samples were collected from the sites (Figure 9.2) at intervals of 1 km. Along with sample collection, water quality was also assessed at the same points. Testing the quality of water is an important part of environmental monitoring (Ritabrata, 2018). The results obtained from our study were compared with guidelines values (permissible limits) which is standardized by BIS (Bureau of Indian standards, 1991) CPCB (IS 2296:1992) and WHO (World Health Organisation, 2011). The quality of water can be determined through measuring the essential physiological parameters

such as pH, Dissolved Oxygen (DO), Total Dissolved Solids (TDS), Conductivity, Specific Conductance Temperature and PAH's pollutants. Except chemical pollutants all parameters were measured with the help of a YSI Professional Digital Sampling System (Pro-DSS- USA). The instrument was programmed to log the data for every 3 minutes in Lohit river and for every 5 seconds in Dibru river and Maguri-Motapung beel. The raw data was stored in the logger of the instrument which was later retrieved using KorDss software and Data Manager software respectively, for statistical analysis.

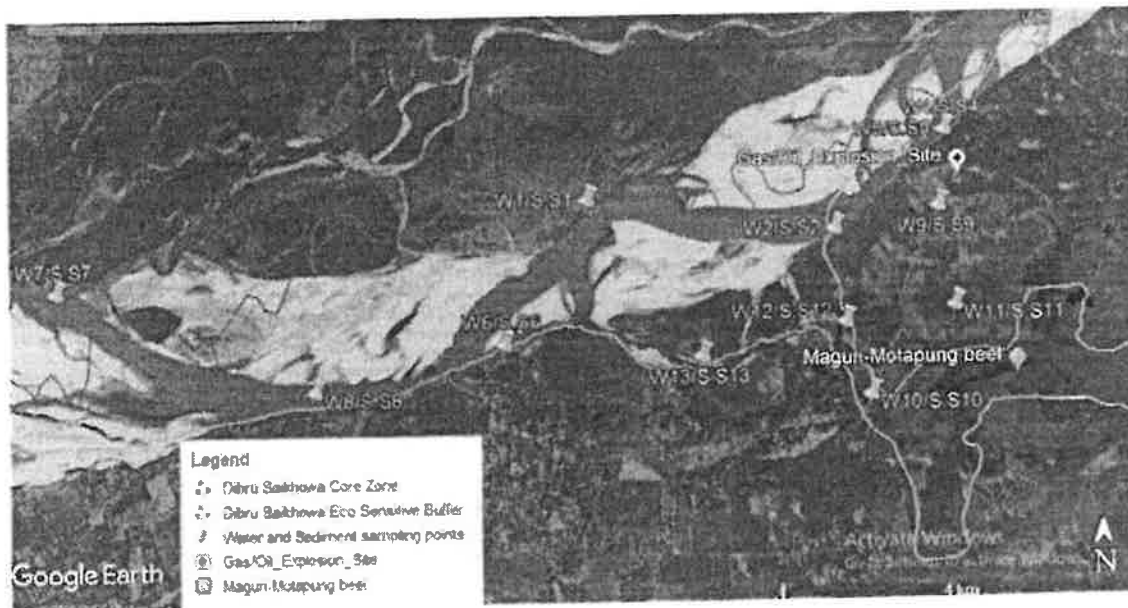


Figure 9.2 Study area map indicating all samplings points assessed before explosion

Physiochemical parameters were measured at each of the sampling points in Lohit river. sampling points from W1 to W8). The Dissolved oxygen (DO) of the river vary with time and season, depending upon the species of phytoplanktons present, light penetration (Tripathi et al., 1991; Das et al., 2013), nutrient availability, temperature, salinity, water movement, partial pressure of atmospheric oxygen in contact with the water, thickness of the surface film and the bio-depletion rates (Ifelebuegu et al. 2017)). It is an important limnological parameter that indicates the level of water quality and organic pollution in the water body (Wetzel and Likens, 2006, Khatoun et al., 2013).

9.8 Sound pollution:

The ambient noise was recorded at a sampling rate of 48 kHz. The strength of the signals obtained were optimized by adjusting and noting down the gain, as it is an important parameter while

recording the sounds using microphone; low gain misses quieter sounds and high gain saturates the recording.

A total of 13 soundwave files were obtained and analysed using Raven Pro 1.5 software (The Cornell Lab). With the recordings, a spectrogram was generated to visualize the spectrum of frequencies (i.e. the amount of energy in the sound at each frequency) of the signal.

For each of our 13 sound recordings, we selected the required sound clip on the spectrogram from Raven software and measured the following

a) **Average Power:** In a grayscale spectrogram, it is the value of the power spectrum (the power spectral density of a single column of spectrogram values) averaged over the frequency extent of the selection. The values of the power spectrum are summed between the lower and upper frequency bounds of the selection, and the result is divided by the number of frequency bins in the selection.

Units: dB.

b) **Maximum/peak power:** In a selection it is the power at the darkest point in the selection. Units: dB re 1 dimensionless sample unit.

From the power and frequency values obtained, we converted the dB reference level to A-weighted dB levels in RStudio. A-weighted dB filter is a psycho-acoustical measure that converts the sound level into a human subjective measure. The full frequency range for young people is 20 to 20,000 Hz, and between 500 Hz and 6,000 Hz human ears are more sensitive than that to lower or higher frequencies. The conventions used here to denote these terms are as follows, LA= A-weighted power, LAeq= equivalent A weighted power, LAmax= maximum A weighted power. LA is synonymous with dBA and dB(A) and is often written as LA = xdB.

9.9 Underwater noise monitoring

Passive acoustic monitoring (PAM) device (The Cetacean Research™ C57 hydrophone series) along with the portable digital field recorder Tascam DR-100 (TASCAM Inc.) were used to monitor underwater sound in July 2020. They were deployed at 500m intervals of the river to get a sound profile. The sampling rate (the number of samples per unit taken from a continuous signal to make a discrete or digital signal) was 192kHz, and the gain was set at 5 to get recordings without saturating the file. The analysis was done for 12 records in RStudio after calibrating for

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hydrophone sensitivity at that particular gain to get the absolute measure to draw comparison spatially. Each recording was 1 minute long, adding up to a total of 12 minutes.

9.10 Dolphin monitoring

Independent double observer method was followed for the Ganges dolphin surveys (Smith, 2006). In double-platform independent observer surveys, sighting data from each platform represents an independent capture occasion, were used in a two-sample capture-recapture framework for estimation of population abundance along with estimates of capture probabilities and precision. We used Chapman's unbiased estimator (Chapman, 1951) to obtain an estimate of the number of dolphins.

$$\hat{N} = \left(\frac{(n_p + 1) \times (n_s + 1)}{m_{ps} + 1} \right) - 1$$

Where,

\hat{N}_c = population size estimate

n_p = number of animals sighted by the primary observer team

n_s = number of animals sighted by the secondary observer team

m_{ps} = number of animals sighted by both teams (matches or recaptures)

The probability of detection is estimated as m_{ps}/n_p , m_{ps}/n_s

The associated variance V_c is given by (Seber 1970):

$$V_c = \frac{(n_p + 1) \times (n_s + 1) \times (n_p - m_{ps}) \times (n_s - m_{ps})}{(m_{ps} + 1)^2 \times (m_{ps} + 2)}$$

The upper and lower ranges of the 95% confidence interval were calculated as

$$95\% \text{ CI} = \hat{N}_c \pm (1.96 \times \text{SD})$$

9.11 Acoustic monitoring of dolphins

Passive acoustic monitoring (PAM) devices were used to understand occurrence and activity pattern of dolphins. C-PODs are one such underwater acoustic loggers meant for cetaceans, that have a single hydrophone with a frequency range of 20 to 160 kHz. The data are logged on to a memory card and retrieved using the C-POD software. Dolphin clicks are separated from other

ambient noise using the in-built function in the software, the KERNON classifier. The automated classifier segregates all acoustic recordings into 'NBHF' (narrow band high frequency), 'Other Cetacean' (which includes river dolphin), 'Sonar' and 'Unclassified'. The classifier also classifies the click trains to 'high', 'moderate', 'low' or 'doubtful' clicks, where 'high' indicates click trains that have a $\geq 75\%$ likelihood of being dolphins. To reduce false positives, we used only 'high' and 'moderate' quality click trains of river dolphins. The CPODs were moored with the required weight and buoys to aid in maintaining the hydrophone in the 30-50% of the water column. This aids in reducing sediment noise and surface noise and optimizes capturing cetacean sounds.

9.12 Biodiversity methods

The survey was done from May, to July 2020. Survey for all these taxa was carried out in grids identified within the concentric circles around well blow out site (Fig 9.3)

Bird:

The habitat in the affected area is segregated into Grassland and wetland. Transects were walked in the grassland regions and boat transects were carried out in the wetland area between 09:00h – 14:00h. A cumulative effort of 3.48 km transect was carried out in the grasslands falling at distances of 1, 2, 4 and 5 km from the explosion site. A cumulative effort of 11 km was in the beel (wetland) area. Data from ebird was downloaded and used to draw comparisons between earlier occurrence reports at locations that fall within our sampling grid and current occurrence. Available data in our sampling regions (from 2010 onwards) are arranged according to sampled grid in Grassland and wetland.

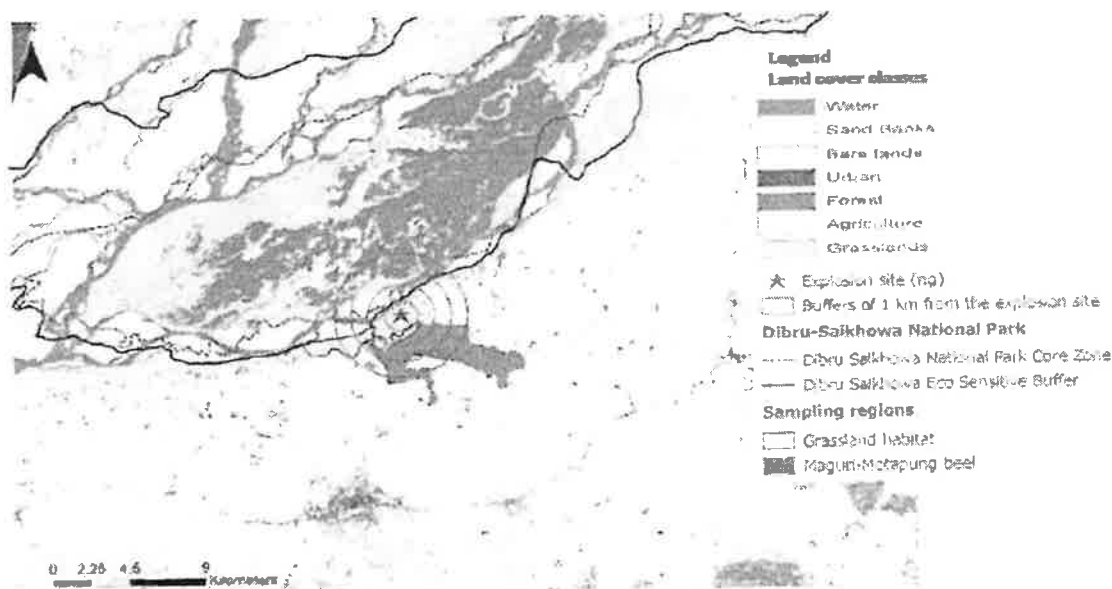


Figure 9.3 Sampling regions, concentric circles of 1km from Baghjan well no.5 (accident site).

Fish: The sampling was carried out with (1.75x1.75 cm, 3.75x3.75 cm, 5x5 cm, 10x10 cm) mesh size of gill net and (0.25x0.25 cm) mesh size of cast net were used for sampling. Gill net was deployed for 60 mins and cast net was cast for 10 times on each site (Table 9.1). The sampling was done after 1.5-2kms of interval. Fishes caught in the net were photographed, weighed and morphometry was recorded for analysis. We followed published taxonomic keys to identify species (K. C. Jayaram 2010) and online identification keys like the Fish base (www.fishbase.org), (Froese and Pauly 2000). Species were then assigned to their threatened status following the IUCN red list category. The health status of fishes caught was also assessed. Dead fishes were collected for effect of pollutants.

Table 9-1 Types of nets used and the effort invested in Maguri-Motapung Beel and Dibru for fish sampling.

Nets	Mesh Size	Length	Effort per site	Total effort
Cast net	0.25 x 0.25 cm	3 m	10 trails	80 trails
Gill net-1	1.75 x 1.75 cm	100 m	1 hr	8 hrs
Gill net-2	3.75 x 3.75 cm	100 m	1 hr	8 hrs

Gill net-3	5×5 cm	100 m	1 hr	8 hrs
Gill net-4	10 x 10 cm	100 m	1 hr	8 hrs

Butterflies and Odonates: A team of one observer and a recorder surveyed the designated grid for a pre-determined time of 20 minutes between 0900h to 1400h. Between two spatial sets of the time-constrained survey, a checklist of species sighted was generated at a point between the two spatial sets. A time constrained survey of three spatially independent sets of 20 minutes each were carried out in one of the grids (2 km from the rig, short-tall grassland interspersed with water puddles) for sampling odonates. The dragonflies and damselflies were photographed in the field and sometimes caught with a net and released without harming the individual after identification. A checklist was generated of species encountered between the spatial sets.

Herpetofauna:

A time-constrained area search method was employed for sampling herpetofauna in each of the four grids (1 km, 2 km, 4 km and 5 km) for a pre-determined time of one hour. The sampling was carried out by active searches underneath logs, leaf litters etc. for presence of animals by 1-2 independent observers within the grid. The searches will be targeting potential regions for encountering common herpetofaunal group, namely skinks, agamids, geckos, snakes, chelonians, frogs and toads. This area has reported to have 17 amphibian, 13, turtle, 11 snakes and 8 lizard species. A cumulative effort of 5.5 km was carried out in the four grids actively searching for the presence of any herpetofauna of any life stages. Sampling was done only during day time, so the list is partial. The checklist of the area (Ahmed and Das, 2010) will be used to assess the probable species present in the area

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11 Appendix 1 – Burned area visualisation

Google Earth engine is used to generate cloud free Sentinel 2 Images to observe the burned area.

```

var roi = ee.Geometry.Point([95.37898, 27.60028]).buffer(5000);

/**
 * Function to mask clouds using the Sentinel 2 QA band
 * @param {ee.Image} Image Sentinel 2 Image
 * @return {ee.Image} cloud masked Sentinel-2 Image
 */
function maskS2clouds(Image) {
  var qa = Image.select('QA60');
  // Bits 10 and 11 are clouds and cirrus, respectively.
  var cloudBitMask = 1 << 10;
  var cirrusBitMask = 1 << 11;
  // Both flags should be set to zero, indicating clear conditions.
  var mask = qa bitwiseAnd(cloudBitMask) eq(0)
    and(qa bitwiseAnd(cirrusBitMask) eq(0));
  return Image.updateMask(mask).divide(10000);
}

var dataset1 = ee.ImageCollection('COPERNICUS/S2_SR')
  .filterDate('2020-05-01', '2020-05-31')
  // Pre-filter to get less cloudy granules.
  .filter(ee.Filter.lt('CLOUDY_PIXEL_PERCENTAGE', 20))
  .map(maskS2clouds);

var dataset2 = ee.ImageCollection('COPERNICUS/S2_SR')
  .filterDate('2020-06-1', '2020-06-30')
  // Pre-filter to get less cloudy granules.
  .filter(ee.Filter.lt('CLOUDY_PIXEL_PERCENTAGE', 20))
  .map(maskS2clouds);

var visualization = {
  min: 0.0,
  max: 0.3,
  bands: ['B4', 'B3', 'B2'],
};

Map.setCenter(95.37898, 27.60028, 15);
Map.addLayer(dataset1.mean().clip(roi), visualization, 'May'); Map.addLayer(dataset2.mean().clip(roi)

```

12 Appendix 2 Checklists of birds recorded earlier from the grasslands (same grids we sampled) collected from eBird site.

S.no	VernacularName	Scientific Name	Resident/ Migratory
1	Black-faced Bunting	<i>Emberiza spodocephala</i> Pallas, 1776	Winter
2	Red-wattled ng	<i>Vanellus indicus</i> (Boddaert, 1783)	Resident
3	Thick-billed Warbler	<i>Arundinax aedon</i>	Winter
4	Chestnut-tailed Starling	<i>Sturnia malabarica</i> (Gmelin, 1789)	Resident
5	Indochinese Roller	<i>Coracias affinis</i> McClelland, 1840	Resident
6	Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus, 1766)	Resident
7	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i> (Tickell, 1833)	Winter
8	Green Imperial- Pigeon	<i>Ducula aenea</i> (Linnaeus, 1766)	Resident
9	Siberian Stonechat	<i>Saxicola maurus</i> (Pallas, 1773)	not found
10	Lesser Whistling- Duck	<i>Dendrocygna javanica</i> (Horsfield, 1821)	Resident
11	Greater Painted- Snipe	<i>Rostratula benghalensis</i> (Linnaeus, 1758)	Resident
12	Striated Grassbird	<i>Megalurus palustris</i> Horsfield, 1821	Resident
13	Jerdon's Babbler	<i>Chrysomma altirostre</i> Jerdon, 1862	Resident
14	Zitting Cisticola	<i>Cisticola juncidis</i> (Rafinesque, 1810)	Resident
15	Great Myna	<i>Acridotheres grandis</i> Moore, 1858	Resident
16	Lesser Coucal	<i>Centropus bengalensis</i> (Gmelin, 1788)	Resident

17	Marsh Babbler	<i>Pellorneum palustre</i> Gould, 1872	Resident
18	Citrine Wagtail	<i>Motacilla citreola</i> Pallas, 1776	Winter
19	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i> (Gmelin, 1789)	Resident
20	Jungle Myna	<i>Acridotheres fuscus</i> (Wagler, 1827)	Resident
21	Greater Coucal	<i>Centropus sinensis</i> (Stephens, 1815)	Resident
22	Yellow Bittern	<i>Ixobrychus sinensis</i>	Resident
23	Paddyfield Pipit	<i>Anthus rufulus</i> Vieillot, 1818	Resident
24	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i> Forster, 1781	Resident
25	Little Cormorant	<i>Microcarbo niger</i> (Vieillot, 1817)	Resident
26	Yellow-bellied Prinia	<i>Prinia flaviventris</i> (Delessert, 1840)	Resident
27	Black Drongo	<i>Dicrurus macrocercus</i> Vieillot, 1817	Resident
28	Common Myna	<i>Acridotheres tristis</i> (Linnaeus, 1766)	Resident
29	Plain Prinia	<i>Prinia inornata</i> Sykes, 1832	Resident
30	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham, 1790)	Resident
31	Bristled Grassbird	<i>Chaetornis striata</i>	Winter
32	Bluethroat	<i>Luscinia svecica</i> (Linnaeus, 1758)	Winter
33	Cattle Egret	<i>Bubulcus ibis</i> (Linnaeus, 1758)	Resident
34	White Wagtail	<i>Motacilla alba</i> Linnaeus, 1758	Winter
35	Gray-headed Swamphe	<i>Porphyrio poliocephalus</i> (Latham, 1801)	Resident
36	Spotted Warbler Bush	<i>Locustella thoracica</i> (Blyth, 1845)	Winter
37	Barn Swallow	<i>Hirundo rustica</i> Linnaeus, 1758	Winter

38	Gray-throated Martin	<i>Riparia chinensis</i> (J.E.Gray, 1830)	not found
39	Brown Boobook	<i>Ninox scutulata</i> (Raffles, 1822)	Resident
40	Swamp Francolin	<i>Francolinus gularis</i> (Temminck, 1815)	Resident
41	Pied Kingfisher	<i>Ceryle rudis</i> (Linnaeus, 1758)	Resident
42	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)	Resident
43	Glossy Ibis	<i>Plegadis falcinellus</i> (Linnaeus, 1766)	Resident
44	Black-winged Kite	<i>Elanus caeruleus</i> (Desfontaines, 1789)	Resident
45	Chestnut-capped Babbler	<i>Timalia pileata</i> Horsfield, 1821	Resident
46	Black Kite	<i>Milvus migrans</i> (Boddaert, 1783)	Resident
47	Eurasian Tree Sparrow	<i>Passer montanus</i> (Linnaeus, 1758)	Resident
48	Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenberg, 1833)	Resident
49	Dusky Warbler	<i>Phylloscopus fuscatus</i> (Blyth, 1842)	Winter
50	Gray Heron	<i>Ardea cinerea</i> Linnaeus, 1758	Resident
51	White-breasted Waterhen	<i>Amaurornis phoenicurus</i> (Pennant, 1769)	Resident
52	Chinese Rubythroat	<i>Calliope tschebaiewi</i>	not found
53	White-throated Kingfisher	<i>Halcyon smyrnensis</i> (Linnaeus, 1758)	Resident
54	Asian Pied Starling	<i>Gracupica contra</i> (Linnaeus, 1758)	Resident
55	Black-hooded Oriole	<i>Oriolus xanthornus</i> (Linnaeus, 1758)	Resident
56	Barred Buttonquail	<i>Turnix suscitator</i>	Resident
57	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	Resident

58	Asian Koel	<i>Eudynamys scolopaceus</i>	Resident
59	Bengal Bushlark	<i>Mirafra assamica</i> Horsfield, 1840	Resident
60	Aberrant Bush Warbler	<i>Horornis flavolivaceus</i> (Blyth, 1845)	Winter
61	Black-winged Stilt	<i>Himantopus himantopus</i> (Linnaeus, 1758)	Resident
62	Asian Openbill	<i>Anastomus oscitans</i> (Boddaert, 1783)	Resident
63	Purple Heron	<i>Ardea purpurea</i> Linnaeus, 1766	Resident
64	Rosy Pipit	<i>Anthus roseatus</i> Blyth, 1847	Winter
65	Spotted Dove	<i>Streptopelia chinensis</i> (Scopoli, 1786)	Resident
66	Rose-ringed Parakeet	<i>Psittacula krameri</i> (Scopoli, 1769)	Resident
67	Oriental Magpie-Robin	<i>Copsychus saularis</i> (Linnaeus, 1758)	Resident
68	Gray Wagtail	<i>Motacilla cinerea</i> Tunstall, 1771	Winter
69	Indian Cuckoo	<i>Cuculus micropterus</i>	Summer
70	Great Egret	<i>Ardea alba</i> Linnaeus, 1758	Resident
71	Eurasian Hoopoe	<i>Upupa epops</i> Linnaeus, 1758	Resident
72	House Crow	<i>Corvus splendens</i> Vieillot, 1817	Resident
73	Baya Weaver	<i>Ploceus philippinus</i> (Linnaeus, 1766)	Resident
74	Oriental Turtle-Dove	<i>Streptopelia orientalis</i> (Latham, 1790)	Resident
75	Temminck's Stint	<i>Calidris temminckii</i> (Leisler, 1812)	Winter
76	Oriental Skylark	<i>Alauda gulgula</i> Franklin, 1831	Resident
77	Little Egret	<i>Egretta garzetta</i> (Linnaeus, 1766)	Resident
78	Striated Babbler	<i>Turdoides earlei</i> (Blyth, 1844)	Resident

79	Paddyfield Warbler	<i>Acrocephalus agricola</i> (Jerdon, 1845)	Winter
80	Striated Heron	<i>Butorides striata</i> (Linnaeus, 1758)	Resident
81	Smoky Warbler	<i>Phylloscopus fuligiventer</i> (Hodgson, 1845)	Winter
82	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i> (Linnaeus, 1758)	Resident
83	Little Ringed Plover	<i>Charadrius dubius</i> Scopoli, 1786	Resident
84	Russet Bush Warbler	<i>Locustella mandelli</i> (W.E. Brooks, 1875)	Resident
85	Ruddy Shelduck	<i>Tadorna ferruginea</i> (Pallas, 1764)	Winter
86	Indian Pond-Heron	<i>Ardeola grayii</i> (Sykes, 1832)	Resident
87	Large-billed Crow	<i>Corvus macrorhynchos</i> Wagler, 1827	Resident
88	Lesser Adjutant	<i>Leptoptilos javanicus</i> (Horsfield, 1821)	Resident
89	Common Sandpiper	<i>Actitis hypoleucos</i> (Linnaeus, 1758)	Winter
90	Green Sandpiper	<i>Tringa ochropus</i> Linnaeus, 1758	Winter
91	Blue-throated Barbet	<i>Psilopogon asiaticus</i>	Resident
92	Gray-breasted Prinia	<i>Prinia hodgsonii</i> Blyth, 1844	Resident
93	Common Greenshank	<i>Tringa nebularia</i> (Gunnerus, 1767)	Winter
94	Western Yellow Wagtail	<i>Motacilla flava</i> Linnaeus, 1758	Winter

13 Appendix 3 Checklists of birds recorded earlier from the wetland area (Maguri-Motapung Beel)(same grids we sampled) collected from eBird

Sno	VernacularName	Scientific Name	Resident/ Migratory
1	Falcated Duck	<i>Mareca falcata</i>	Winter
2	Citrine Wagtail	<i>Motacilla citreola</i> Pallas, 1776	Winter
3	Indian Pond-Heron	<i>Ardeola grayii</i> (Sykes, 1832)	Resident
4	Eastern Spot-billed Duck	<i>Anas zonorhyncha</i> Swinhoe, 1866	?
5	Great Egret	<i>Ardea alba</i> Linnaeus, 1758	Resident
6	Purple Heron	<i>Ardea purpurea</i> Linnaeus, 1766	Resident
7	Chinese Rubythroat	<i>Calliope tschebaiewi</i>	not found
8	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i> (Scopoli, 1786)	Resident
9	Bluethroat	<i>Luscinia svecica</i> (Linnaeus, 1758)	Winter
10	Striated Babbler	<i>Turdoides earlei</i> (Blyth, 1844)	Resident
11	Plain Prinia	<i>Prinia inornata</i> Sykes, 1832	Resident
12	Cattle Egret	<i>Bubulcus ibis</i> (Linnaeus, 1758)	Resident
13	Eurasian Coot	<i>Fulica atra</i> Linnaeus, 1758	Resident
14	Ferruginous Duck	<i>Aythya nyroca</i> (Guldenstadt, 1770)	Winter
15	Bar-headed Goose	<i>Anser indicus</i> (Latham, 1790)	Winter
16	Eurasian Wigeon	<i>Mareca penelope</i> (Linnaeus, 1758)	Winter
17	Asian Openbill	<i>Anastomus oscitans</i> (Boddaert, 1783)	Resident
18	Northern Lapwing	<i>Vanellus vanellus</i> (Linnaeus, 1758)	Winter

19	Little Grebe	<i>Tachybaptus ruficollis</i> (Pallas, 1764)	Resident
20	Wood Sandpiper	<i>Tringa glareola</i> Linnaeus, 1758	Winter
21	Western Yellow Wagtail	<i>Motacilla flava</i> Linnaeus, 1758	Winter
22	Graylag Goose	<i>Anser anser</i> (Linnaeus, 1758)	Winter
23	Gray-backed Shrike	<i>Lanius tephronotus</i> (Vigors, 1831)	Winter
24	Asian Pied Starling	<i>Gracupica contra</i> (Linnaeus, 1758)	Resident
25	Green-winged Teal	<i>Anas crecca</i> Linnaeus, 1758	Winter
26	Red Collared-Dove	<i>Streptopelia tranquebarica</i>	Resident
27	Mallard	<i>Anas platyrhynchos</i> Linnaeus, 1758	Winter
28	Great Myna	<i>Acridotheres grandis</i> Moore, 1858	Resident
29	Little Cormorant	<i>Microcarbo niger</i> (Vieillot, 1817)	Resident
30	Jungle Myna	<i>Acridotheres fuscus</i> (Wagler, 1827)	Resident
31	Watercock	<i>Gallicrex cinerea</i> (Gmelin, 1789)	Resident
32	Black-faced Bunting	<i>Emberiza spodocephala</i> Pallas, 1776	Winter
33	Siberian Stonechat	<i>Saxicola maurus</i> (Pallas, 1773)	not found
34	Long-tailed Shrike	<i>Lanius schach</i> Linnaeus, 1758	Winter
35	Gadwall	<i>Mareca strepera</i> (Linnaeus, 1758)	Winter
36	Eurasian Marsh-Harrier	<i>Circus aeruginosus</i> (Linnaeus, 1758)	Winter
37	Eurasian Wryneck	<i>Jynx torquilla</i> Linnaeus, 1758	Winter
38	Bronze-winged Jacana	<i>Metopidius indicus</i> (Latham, 1790)	Resident
39	Little Egret	<i>Egretta garzetta</i> (Linnaeus, 1766)	Resident
40	Ruddy Shelduck	<i>Tadorna ferruginea</i> (Pallas, 1764)	Winter

41	Red-crested Pochard	<i>Netta rufina</i> (Pallas, 1773)	Winter
42	Northern Shoveler	<i>Spatula clypeata</i> (Linnaeus, 1758)	Winter
43	Glossy Ibis	<i>Plegadis falcinellus</i> (Linnaeus, 1766)	Resident
44	Swamp Francolin	<i>Francolinus gularis</i> (Temminck, 1815)	Resident
45	House Crow	<i>Corvus splendens</i> Vieillot, 1817	Resident
46	Eurasian Moorhen	<i>Gallinula chloropus</i> (Linnaeus, 1758)	Resident
47	White Wagtail	<i>Motacilla alba</i> Linnaeus, 1758	Winter
48	Green Imperial-Pigeon	<i>Ducula aenea</i> (Linnaeus, 1766)	Resident
49	Pin-tailed Snipe	<i>Gallinago stenura</i> (Bonaparte, 1831)	Winter
50	Rosy Pipit	<i>Anthus roseatus</i> Blyth, 1847	Winter
51	Smoky Warbler	<i>Phylloscopus fuligiventer</i> (Hodgson, 1845)	Winter
52	Bengal Bushlark	<i>Mirafra assamica</i> Horsfield, 1840	Resident
53	Common Sandpiper	<i>Actitis hypoleucos</i> (Linnaeus, 1758)	Winter
54	Montagu's Harrier	<i>Circus pygargus</i> (Linnaeus, 1758)	Winter
55	White-breasted Waterhen	<i>Amaurornis phoenicurus</i> (Pennant, 1769)	Resident
56	Large-billed Crow	<i>Corvus macrohynchus</i> Wagler, 1827	Resident
57	Black-winged Kite	<i>Elanus caeruleus</i> (Desfontaines, 1789)	Resident
58	Jerdon's Babbler	<i>Chrysomma altirostre</i> Jerdon, 1862	Resident
59	Swamp Grass Babbler	<i>Laticilla cinerascens</i> (Walden, 1874)	not found
60	Striated Heron	<i>Butorides striata</i> (Linnaeus, 1758)	Resident
61	Black Drongo	<i>Dicrurus macrocerus</i> Vieillot, 1817	Resident

62	Fulvous Whistling-Duck	<i>Dendrocygna bicolor</i> (Vieillot, 1816)	Resident
63	House Sparrow	<i>Passer domesticus</i> (Linnaeus, 1758)	Resident
64	Garganey	<i>Spatula querquedula</i> (Linnaeus, 1758)	Winter
65	Lesser Adjutant	<i>Leptoptilos javanicus</i> (Horsfield, 1821)	Resident
66	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i> Forster, 1781	Resident
67	Ruddy-breasted Crake	<i>Zapornia fusca</i>	Resident
68	Eurasian Tree Sparrow	<i>Passer montanus</i> (Linnaeus, 1758)	Resident
69	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham, 1790)	Resident
70	Crimson Sunbird	<i>Aethopyga siparaja</i> (Raffles, 1822)	Resident
71	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	Resident
72	Pale Sand Martin	<i>Riparia diluta</i> (Sharpe & Wyatt, 1893)	?
73	Northern Pintail	<i>Anas acuta</i> Linnaeus, 1758	Winter
74	Striated Grassbird	<i>Megalurus palustris</i> Horsfield, 1821	Resident
75	Common Myna	<i>Acridotheres tristis</i> (Linnaeus, 1766)	Resident
76	Brown-cheeked Rail	<i>Rallus indicus</i> Blyth, 1849	Winter
77	Black Redstart	<i>Phoenicurus ochruros</i> (S.G.Gmelin, 1774)	Autumn/Spring
78	Gray-headed Swamphen	<i>Porphyrio poliocephalus</i> (Latham, 1801)	Resident
79	Spotted Dove	<i>Streptopelia chinensis</i> (Scopoli, 1786)	Resident
80	Green Sandpiper	<i>Tringa ochropus</i> Linnaeus, 1758	Winter
81	Common Hawk-Cuckoo	<i>Hierococcyx varius</i>	Resident

82	Red-wattled Lapwing	<i>Vanellus indicus</i> (Boddaert, 1783)	Resident
83	Himalayan Griffon	<i>Gyps himalayensis</i> Hume, 1869	Winter
84	Chestnut-capped Babbler	<i>Timalia pileata</i> Horsfield, 1821	Resident
85	Slender-billed Vulture	<i>Gyps tenuirostris</i> G.R.Gray, 1844	Resident
86	Chestnut-eared Bunting	<i>Emberiza fucata</i>	Winter
87	Yellow Bittern	<i>Ixobrychus sinensis</i>	Resident
88	Common Pochard	<i>Aythya ferina</i> (Linnaeus, 1758)	Winter
89	Paddyfield Warbler	<i>Acrocephalus agricola</i> (Jerdon, 1845)	Winter
90	Dusky Warbler	<i>Phylloscopus fuscatus</i> (Blyth, 1842)	Winter
91	Hen Harrier	<i>Circus cyaneus</i> (Linnaeus, 1766)	Winter
92	Common Kingfisher	<i>Alcedo arthis</i> (Linnaeus, 1758)	Resident
93	Ashy Woodswallow	<i>Artamus fuscus</i> Vieillot, 1817	Resident
94	Gray Wagtail	<i>Motacilla cinerea</i> Tunstall, 1771	Winter
95	Spotted Bush Warbler	<i>Locustella thoracica</i> (Blyth, 1845)	Winter
96	Pied Harrier	<i>Circus melanoleucos</i> (Pennant, 1769)	Winter
97	Pied Kingfisher	<i>Ceryle rudis</i> (Linnaeus, 1758)	Resident
98	Chestnut Munia	<i>Lonchura atricapilla</i> (Vieillot, 1807)	Resident
99	Little Ringed Plover	<i>Charadrius dubius</i> Scopoli, 1786	Resident
100	Lesser Whistling-Duck	<i>Dendrocygna javanica</i> (Horsfield, 1821)	Resident
101	Stork-billed Kingfisher	<i>Pelargopsis capensis</i> (Linnaeus, 1766)	Resident
102	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i> (Temminck, 1821)	Resident

103	Asian Palm-Swift	<i>Cypsiurus balasiensis</i> (J.E.Gray, 1829)	Resident
104	Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i> (Hemprich & Ehrenberg, 1833)	Resident
105	Golden-headed Cisticola	<i>Cisticola exilis</i> (Vigors & Horsfield, 1827)	Resident
106	Barn Swallow	<i>Hirundo rustica</i> Linnaeus, 1758	Winter
107	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i> (Tickell, 1833)	Winter
108	Marsh Sandpiper	<i>Tringa stagnatilis</i> (Bechstein, 1803)	Winter
109	Oriental Scops-Owl	<i>Otus sunia</i> (Hodgson, 1836)	Resident
110	Marsh Babbler	<i>Pellorneum palustre</i> Gould, 1872	Resident
111	River Tern	<i>Sterna aurantia</i> J.E.Gray, 1831	Resident
112	Baikal Teal	<i>Sibirionetta formosa</i> (Georgi, 1775)	Winter
113	Collared Scops-Owl	<i>Otus letia</i> (Hodgson, 1836)	Resident
114	Paddyfield Pipit	<i>Anthus rufulus</i> Vieillot, 1818	Resident
115	Richard's Pipit	<i>Anthus richardi</i> Vieillot, 1818	Winter
116	Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus, 1766)	Resident
117	Black-winged Stilt	<i>Himantopus himantopus</i> (Linnaeus, 1758)	Resident
118	Tufted Duck	<i>Aythya fuligula</i> (Linnaeus, 1758)	Winter
119	Brown Boobook	<i>Ninox scutulata</i> (Raffles, 1822)	Resident
120	Oriental Darter	<i>Anhinga melanogaster</i> Pennant, 1769	Resident
121	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i> (Linnaeus, 1758)	Resident
122	Gray Heron	<i>Ardea cinerea</i> Linnaeus, 1758	Resident

123	Temminck's Stint	<i>Calidris temminckii</i> (Leisler, 1812)	Winter
124	Shikra	<i>Accipiter badius</i> (Gmelin, 1788)	Resident
125	Baya Weaver	<i>Ploceus philippinus</i> (Linnaeus, 1766)	Resident
126	Yellow-bellied Prinia	<i>Prinia flaviventris</i> (Delessert, 1840)	Resident
127	Intermediate Egret	<i>Ardea intermedia</i> Wagler, 1827	Resident
128	Eurasian Sparrowhawk	<i>Accipiter nisus</i> (Linnaeus, 1758)	Resident
129	Whiskered Tern	<i>Chlidonias hybrida</i>	Winter
130	Great Cormorant	<i>Phalacrocorax carbo</i> (Linnaeus, 1758)	Winter
131	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)	Resident
132	Oriental Magpie-Robin	<i>Copsychus saularis</i> (Linnaeus, 1758)	Resident
133	Cotton Pygmy-Goose	<i>Nettapus coromandelianus</i> (Gmelin, 1789)	Resident
134	Oriental Skylark	<i>Alauda gulgula</i> Franklin, 1831	Resident
135	Zitting Cisticola	<i>Cisticola juncidis</i> (Rafinesque, 1810)	Resident
136	Baikal Bush Warbler	<i>Locustella davidi</i> (La Touche, 1923)	?
137	Common Snipe	<i>Gallinago gallinago</i> (Linnaeus, 1758)	Winter
138	Kentish Plover	<i>Charadrius alexandrinus</i> Linnaeus, 1758	Winter
139	Asian Barred Owllet	<i>Glaucidium cuculoides</i> (Vigors, 1831)	Resident
140	Himalayan Shortwing	<i>Brachypteryx cruralis</i>	not found
141	Cinereous Tit	<i>Parus cinereus</i> Vieillot, 1818	Resident
142	Black Stork	<i>Ciconia nigra</i> (Linnaeus, 1758)	Winter
143	White-rumped Vulture	<i>Gyps bengalensis</i> (Gmelin, 1788)	Resident

144	White-throated Kingfisher	<i>Halcyon smymensis</i> (Linnaeus, 1758)	Resident
145	Blunt-winged Warbler	<i>Acrocephalus concinens</i> (Swinhoe, 1870)	Resident
146	Large Cuckooshrike	<i>Coracina macei</i> (Lesson, 1831)	Resident
147	Yellow-footed Green-Pigeon	<i>Treeron phoenicopterus</i> (Larham, 1790)	Resident
148	Small Pratincole	<i>Glareola lactea</i> Temminck, 1820	Resident
149	Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i> (Linnaeus, 1758)	Resident
150	Greater Coucal	<i>Centropus sinensis</i> (Stephens, 1815)	Resident
151	Common Redshank	<i>Tringa totanus</i> (Linnaeus, 1758)	Winter
152	Chestnut-tailed Starling	<i>Sturnia malabarica</i> (Gmelin, 1789)	Resident
153	Eurasian Curlew	<i>Numenius arquata</i> (Linnaeus, 1758)	Winter
154	Siberian Rubythroat	<i>Calliope calliope</i> (Pallas, 1776)	Winter
155	Olive-backed Pipit	<i>Anthus hodgsoni</i> Richmond, 1907	Winter
156	Gray Bushchat	<i>Saxicola ferreus</i> J.E.Gray & G.R.Gray, 1847	Winter
157	Pallas's Grasshopper-Warbler	<i>Locustella certhiola</i> (Pallas, 1811)	Winter
158	Mountain Tailorbird	<i>Phyllergates cuculatus</i>	Resident
159	Pacific Golden-Plover	<i>Pluvialis fulva</i> (Gmelin, 1789)	Winter
160	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i> (Gmelin, 1789)	Resident
161	Indochinese Roller	<i>Coracias affinis</i> McClelland, 1840	Resident
162	Peregrine Falcon	<i>Falco peregrinus</i> Tunstall, 1771	Winter
163	Abbott's Babbler	<i>Malacocincla abbotti</i>	Resident

164	Blue-throated Barbet	<i>Psilopogon asiaticus</i>	Resident
165	Common Shelduck	<i>Tadorna tadorna</i> (Linnaeus, 1758)	Winter
166	Gray-throated Martin	<i>Riparia chinensis</i> (J.E.Gray, 1830)	not found
167	Aberrant Bush Warbler	<i>Horornis flavolivaceus</i> (Blyth, 1845)	Winter
168	White-browed Wagtail	<i>Motacilla maderaspatensis</i> Gmelin, 1789	Winter
169	Long-billed Plover	<i>Charadrius placidus</i> J.E.Gray & G.R.Gray, 1863	Winter
170	Rose-ringed Parakeet	<i>Psittacula krameri</i> (Scopoli, 1769)	Resident
171	Greater Painted-Snipe	<i>Rostratula benghalensis</i> (Linnaeus, 1758)	Resident
172	European Starling	<i>Sturnus vulgaris</i> Linnaeus, 1758	Winter
173	Blyth's Reed Warbler	<i>Acrocephalus dumetorum</i> Blyth, 1849	Winter
174	Lineated Barbet	<i>Psilopogon lineatus</i>	Resident
175	Eurasian Collared-Dove	<i>Streptopelia decaocto</i> (Frisvaldszky, 1838)	Resident
176	Common Greenshank	<i>Tringa nebularia</i> (Gunnerus, 1767)	Winter
177	Blyth's Pipit	<i>Anthus godlewskii</i> (Taczanowski, 1876)	Winter
178	Eurasian Kestrel	<i>Falco tinnunculus</i> Linnaeus, 1758	Winter
179	Rock Pigeon	<i>Columba livia</i> Gmelin, 1789	Resident
180	Gray-headed Lapwing	<i>Vanellus cinereus</i> (Blyth, 1842)	Winter
181	Red-necked Falcon	<i>Falco chicquera</i> Daudin, 1800	Resident
182	Bronzed Drongo	<i>Dicrurus aeneus</i> Vieillot, 1817	Resident

183	Lesser Coucal	<i>Centropus bengalensis</i> (Gmelin, 1788)	Resident
184	Black-hooded Oriole	<i>Oriolus xanthornus</i> (Linnaeus, 1758)	Resident
185	Great Crested Grebe	<i>Podiceps cristatus</i> (Linnaeus, 1758)	Winter
186	Little Stint	<i>Calidris minuta</i> (Leisler, 1812)	Winter
187	Jungle Babbler	<i>Turdoides striata</i> (Dumont, 1823)	Resident
188	Common Crane	<i>Grus grus</i> (Linnaeus, 1758)	Winter
189	Great Eared-Nightjar	<i>Lyncornis macrotis</i>	Summer
190	Taiga Flycatcher	<i>Ficedula albicilla</i> (Pallas, 1811)	Winter
191	Bank Myna	<i>Acridotheres ginginianus</i> (Latham, 1790)	Resident
192	Gray-breasted Prinia	<i>Prinia hodgsonii</i> Blyth, 1844	Resident
193	Baillon's Crake	<i>Zapornia pusilla</i> (Pallas, 1776)	Winter
194	Blue Whistling-Thrush	<i>Myophonus caeruleus</i>	Winter
195	Streaked Weaver	<i>Ploceus manyar</i> (Horsfield, 1821)	Resident
196	Black-headed Gull	<i>Chroicocephalus ridibundus</i> (Linnaeus, 1766)	Winter
197	Water Rail	<i>Rallus aquaticus</i> Linnaeus, 1758	Winter
198	Black Kite	<i>Milvus migrans</i> (Boddaert, 1783)	Resident
199	Red-rumped Swallow	<i>Cecropis daurica</i> (Laxmann, 1769)	Winter
200	Russet Bush Warbler	<i>Locustella mandelli</i> (W.E. Brooks, 1875)	Resident
201	Common Hill Myna	<i>Gracula religiosa</i> Linnaeus, 1758	Resident
202	Chestnut-crowned Bush Warbler	<i>Cettia major</i> (Moore, 1854)	Summer

203	Oriental Turtle-Dove	<i>Streptopelia orientalis</i> (Latham, 1790)	Resident
204	Brown Crake	<i>Zapornia akool</i>	Resident
205	Ashy Prinia	<i>Prinia socialis</i> Sykes, 1832	Resident
206	Brown Shrike	<i>Lanius cristatus</i> Linnaeus, 1758	Winter
207	Jack Snipe	<i>Limnocyptes minimus</i> (Brunnich, 1764)	Winter
208	Asian Koel	<i>Eudynamys scolopaceus</i>	Resident
209	Greater Spotted Eagle	<i>Clanga clanga</i> (Pallas, 1811)	Winter
210	Graceful Prinia	<i>Prinia gracilis</i> (Lichtenstein, 1823)	Resident
211	Coppersmith Barbet	<i>Ptilopogon haemacephalus</i> (Müller, 1776)	Resident
212	Streak-throated Woodpecker	<i>Picus xanthopygaeus</i> (J.E.Gray & G.R.Gray, 1847)	Resident
213	Spot-billed Pelican	<i>Pelecanus philippensis</i> Gmelin, 1789	Resident
214	Thick-billed Warbler	<i>Arundinax aedon</i>	Winter
215	Red-breasted Parakeet	<i>Psittacula alexandri</i> (Linnaeus, 1758)	Resident
216	Baer's Pochard	<i>Aythya baeri</i> (Radde, 1863)	Winter
217	Hair-crested Drongo	<i>Dicrurus hottentottus</i> (Linnaeus, 1766)	Resident
218	Gray-headed Canary-Flycatcher	<i>Culicicapa ceylonensis</i> (Swainson, 1820)	Winter
219	Indian White-eye	<i>Zosterops palpebrosus</i> (Temminck, 1824)	Resident
220	Alexandrine Parakeet	<i>Psittacula eupatria</i> (Linnaeus, 1766)	Resident
221	Black-breasted Parrotbill	<i>Paradoxornis flavirostris</i> Gould, 1836	Resident

222	White-tailed Robin	<i>Myiomela leucura</i> (Hodgson, 1845)	Resident
223	Alpine Swift	<i>Apus melba</i> (Linnaeus, 1758)	Winter
224	Oriental Pied-Hornbill	<i>Anthracoceros albirostris</i> (Shaw, 1808)	Resident
225	Little Pied Flycatcher	<i>Ficedula westermanni</i> (Sharpe, 1888)	Resident
226	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i> (Latham, 1790)	Resident
227	White-rumped Munia	<i>Lonchura striata</i> (Linnaeus, 1766)	Resident
228	Pallas's Gull	<i>Ichthyaeetus ichthyaeetus</i> (Pallas, 1773)	Winter
229	Little Bunting	<i>Emberiza pusilla</i> Pallas, 1776	Winter
230	River Lapwing	<i>Vanellus duvaucelii</i> (Lesson, 1826)	Resident
231	Spotted Owlet	<i>Athene brama</i> (Temminck, 1821)	Resident
232	Oriental Pratincole	<i>Glareola maldivarum</i> J.R.Forster, 1795	Resident
233	Black-headed Ibis	<i>Threskiornis melanocephalus</i> (Latham, 1790)	?
234	Sand Lark	<i>Alaudala raytal</i>	Resident
235	Little Spiderhunter	<i>Arachnothera longirostra</i> (Latham, 1790)	Resident
236	Crested Serpent-Eagle	<i>Spilornis cheela</i> (Latham, 1790)	Resident
237	Brown-headed Gull	<i>Chroicocephalus brunnicephalus</i> (Jerdon, 1840)	Winter
238	Blue-tailed Bee-eater	<i>Merops philippinus</i> Linnaeus, 1766	Summer
239	House Swift	<i>Apus nipalensis</i> (Hodgson, 1837)	Resident
240	Eurasian Spoonbill	<i>Platalea leucorodia</i> Linnaeus, 1758	Resident
241	Eurasian Hoopoe	<i>Upupa epops</i> Linnaeus, 1758	Resident

242	Bristled Grassbird	<i>Chaetornis striata</i> (Jerdon, 1841)	?
243	Osprey	<i>Pandion haliaetus</i> (Linnaeus, 1758)	Winter
244	Rufescent Prinia	<i>Prinia rufescens</i> Blyth, 1847	Resident
245	Nepal House-Martin	<i>Delichon nipalense</i> Moore, 1854	Resident
246	Striated Prinia	<i>Prinia crinigera</i> Hodgson, 1836	Resident
247	Scaly-breasted Munia	<i>Lonchura punctulata</i> (Linnaeus, 1758)	Resident
248	Blue-breasted Quail	<i>Synoicus chinensis</i> (Linnaeus, 1766)	Resident
249	Laggar Falcon	<i>Falco jugger</i> J.E.Gray, 1834	Resident
250	Eastern Yellow Wagtail	<i>Motacilla tschutschensis</i> Gmelin, 1789	Winter
251	Red Knot	<i>Calidris canutus</i> (Linnaeus, 1758)	Winter
252	White-throated Needletail	<i>Hirundapus caudacutus</i> (Latham, 1802)	Summer
253	Brown-backed Needletail	<i>Hirundapus giganteus</i> (Temminck, 1825)	Resident
254	Bank Swallow	<i>Riparia riparia</i> (Linnaeus, 1758)	?
255	Green Bee-eater	<i>Merops orientalis</i> Latham, 1801	Resident
256	Whistler's Warbler	<i>Phylloscopus whistleri</i>	Winter
257	Black-rumped Flameback	<i>Dinopium benghalense</i>	Resident
258	Red Avadavat	<i>Amandava amandava</i> (Linnaeus, 1758)	Resident
259	Pygmy Flycatcher	<i>Ficedula hodgsoni</i> (F.Moore, 1854)	Winter
260	White-rumped Shama	<i>Copsychus malabaricus</i>	Resident
261	Indian Cuckoo	<i>Cuculus micropterus</i> Gould, 1838	Summer
262	Crested Bunting	<i>Emberiza lathami</i> J.E.Gray, 1831	Resident

263	Common Iora	<i>Aegithina tiphia</i> (Linnaeus, 1758)	Resident
264	Hodgson's Redstart	<i>Phoenicurus hodgsoni</i> (Moore, 1854)	Winter
265	Slaty-breasted Rail	<i>Lewinia</i> G.R.Gray, 1855	Resident
266	Small Niltava	<i>Niltava macgrigoriae</i> (Burton, 1836)	Winter
267	Steppe Eagle	<i>Aquila nipalensis</i> Hodgson, 1833	Winter
268	Black-tailed Godwit	<i>Limosa limosa</i> (Linnaeus, 1758)	Winter
269	Ruff	<i>Calidris pugnax</i> (Linnaeus, 1758)	Winter
270	Smew	<i>Mergellus albellus</i> (Linnaeus, 1758)	Winter
271	Chestnut-crowned Warbler	<i>Phylloscopus castaniceps</i>	Winter
272	Black Bittern	<i>Ixobrychus flavicollis</i> (Latham, 1790)	Winter
273	Himalayan Swiftlet	<i>Aerodramus brevirostris</i> (Horsfield, 1840)	Resident
274	Scarlet Minivet	<i>Pterococotus speciosus</i> (Latham, 1790)	Resident
275	Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i> (Linnaeus, 1766)	Resident
276	Eastern Marsh-Harrier	<i>Circus spilonotus</i> Kaup, 1847	Winter
277	Barred Buttonquail	<i>Turdix suscitator</i> (Gmelin, 1789)	Resident
278	White-tailed Eagle	<i>Haliaeetus albicilla</i> (Linnaeus, 1758)	Winter
279	Black-browed Reed Warbler	<i>Acrocephalus bistrigiceps</i> Swinhoe, 1860	Winter
280	Russet Sparrow	<i>Passer cinnamomeus</i>	Winter
281	Collared Owlet	<i>Glaucidium brodiei</i> (Burton, 1836)	Resident
282	Golden-fronted Leafbird	<i>Chloropsis aurifrons</i> (Temminck, 1829)	Resident

283	Striated Swallow	<i>Cecropis striolata</i> (Schlegel, 1844)	Resident
284	Pin-striped Tit-Babbler	<i>Mixornis gularis</i>	Resident
285	Crested Goshawk	<i>Accipiter trivirgatus</i> (Temminck, 1824)	Resident
286	Dunlin	<i>Calidris alpina</i> (Linnaeus, 1758)	Winter
287	Spotted Redshank	<i>Tringa erythropus</i> (Pallas, 1764)	Winter
288	Pied Bushchat	<i>Saxicola caprata</i> (Linnaeus, 1766)	Winter
289	Blue-eared Barbet	<i>Psilopogon duvaucelii</i>	Resident
290	Plaintive Cuckoo	<i>Cacomantis merulinus</i> (Scopoli, 1786)	Resident
291	Pallas's Fish-Eagle	<i>Haliaeetus leucoryphus</i> (Pallas, 1771)	Resident
292	Amur Falcon	<i>Falco amurensis</i> Radde, 1863	Winter
293	Ashy Drongo	<i>Dicrurus leucophaeus</i> Vieillot, 1817	Resident
294	Puff-throated Babbler	<i>Pellorneum ruficeps</i> Swainson, 1832	Resident
295	Spot-winged Starling	<i>Saroglossa spiloptera</i> (Vigors, 1831)	Resident
296	Green-billed Malkoha	<i>Phaenicophaeus tristis</i> (Lesson, 1830)	Resident
297	Vernal Hanging-Parrot	<i>Loriculus vernalis</i> (Spartman, 1787)	Resident
298	White-eyed Buzzard	<i>Buteo teesa</i> (Franklin, 1831)	Resident
299	Greater Scaup	<i>Aythya marila</i> (Linnaeus, 1761)	Winter
300	Striated Bulbul	<i>Pycnonotus striatus</i> (Blyth, 1842)	Resident
301	Eurasian Griffon	<i>Gyps fulvus</i> (Hablizl, 1783)	Winter
302	Daurian Redstart	<i>Phoenicurus aureus</i> (Pallas, 1776)	Winter
303	White-browed Crake	<i>Amamiornis cinerea</i> (Vieillot, 1819)	not found
304	Purple Sunbird	<i>Cinnyris asiaticus</i> (Latham, 1790)	Resident

305	Changeable Hawk-Eagle	<i>Nisaetus cirrhatus</i> (Gmelin, 1788)	Resident
306	Gray-sided Bush Warbler	<i>Cettia brunifrons</i> (Hodgson, 1845)	Winter
307	Eurasian Hobby	<i>Falco subbuteo</i> Linnaeus, 1758	Winter
308	Plain Flowerpecker	<i>Dicaeum minullum</i> Swinhoe, 1870	Resident
309	Greenish Warbler	<i>Phylloscopus trochiloides</i> (Sundevall, 1837)	Winter
310	Blue-eared Kingfisher	<i>Alcedo meninting</i> Horsfield, 1821	Resident
311	Gray Treepie	<i>Dendrocitta formosae</i> Swinhoe, 1863	Resident
312	Large Hawk-Cuckoo	<i>Hierococcyx sparveroides</i>	Summer
313	Black-breasted Weaver	<i>Ploceus benghalensis</i> (Linnaeus, 1758)	Resident
314	Painted Stork	<i>Mycteria leucocephala</i> (Pennant, 1769)	Winter
315	Dollarbird	<i>Eurystomus orientalis</i> (Linnaeus, 1766)	Resident
316	Pied Avocet	<i>Recurvirostra avosetta</i> Linnaeus, 1758	Winter
317	Lesser Sand-Plover	<i>Charadrius mongolus</i> Pallas, 1776	Winter
318	White-tailed Stonechat	<i>Saxicola leucurus</i> (Blyth, 1847)	Resident
319	Short-eared Owl	<i>Asio flammeus</i> (Pontoppidan, 1763)	Winter
320	Black-throated Prinia	<i>Prinia atrogularis</i> (Moore, 1854)	Resident
321	Indian Golden Oriole	<i>Oriolus kundoo</i> Sykes, 1832	?
322	Lesser Cuckoo	<i>Cuculus poliocephalus</i> Latham, 1790	Summer
323	Black-crested Bulbul	<i>Rubigula</i> Blyth, 1845	Resident
324	Yellow-vented Flowerpecker	<i>Dicaeum chrysorrheum</i> Temminck, 1829	Resident

325	Crested Kingfisher	<i>Megaceryle lugubris</i> (Temminck, 1834)	Resident
326	Yellow-browed Warbler	<i>Phylloscopus inornatus</i> (Blyth, 1842)	Winter
327	Black Bulbul	<i>Hypsipetes leucocephalus</i> (Gmelin, 1789)	Resident
328	Barred Cuckoo-Dove	<i>Macropygia unchall</i> (Wagler, 1827)	Resident
329	Rufous-capped Babbler	<i>Cyanoderma ruficeps</i>	Resident
330	White-throated Bulbul	<i>Alphoixus flaveolus</i> (Gould, 1836)	Resident
331	Rufous-bellied Niltava	<i>Niltava sundara</i> Hodgson, 1837	Winter
332	Slaty-bellied Tesia	<i>Tesia olivacea</i> (McClelland, 1840)	Winter
333	Gray-cheeked Warbler	<i>Phylloscopus poliogenys</i>	Winter
334	Greater Yellownape	<i>Chrysophlegma flavinucha</i>	Resident
335	Blyth's Leaf Warbler	<i>Phylloscopus reguloides</i> (Blyth, 1842)	Winter

14 Appendix 4 Checklist of birds recorded by us in grassland

Sl No.	Common Name	Scientific Name
1	Asian Palm-Swift	<i>Cypsiurus balacensis</i> (J.E.Gray, 1829)
2	Asian Pied Starling	<i>Grampelia contra</i> (Linnaeus, 1758)
3	Barn Swallow	<i>Hirundo rustica</i> Linnaeus, 1758
4	Black Drongo	<i>Dicrurus macrocerus</i> Vieillot, 1817
5	Black-winged Kite	<i>Elanus caeruleus</i> (Desfontaines, 1789)
6	Bronze-winged Jacana	<i>Melopidius indicus</i> (Latham, 1790)
7	Bush lark	<i>Mirafra asiatica</i>
8	Cattle Egret	<i>Bubulcus ibis</i> (Linnaeus, 1758)
9	Chestnut-capped Babbler	<i>Timalia pileata</i> (Call heard)
10	Common Myna	<i>Acridotheres tristis</i> (Linnaeus, 1766)
11	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant, 1769)
12	Cotton Pygmy-Goose	<i>Nettion coronata</i> (Gmelin, 1789)
13	Fulvous Whistling Duck	<i>Dendrocygna bicolor</i>
14	Indochinese Roller	<i>Coracias affinis</i> McClelland, 1840
15	Intermediate Egret	<i>Ardea intermedia</i> Wagler, 1827
16	Large-billed Crow	<i>Corvus macrorhynchos</i> Wagler, 1827
17	Lesser Whistling-Duck	<i>Dendrocygna javanica</i> (Horsfield, 1821)
18	Little Cormorant	<i>Microcarbo niger</i> (Vieillot, 1817)
29	Little Egret	<i>Egretta garzetta</i> (Linnaeus, 1766)
20	Common Myna	<i>Acridotheres tristis</i>
21	Pied Kingfisher	<i>Ceryle rudis</i> (Linnaeus, 1758)
22	Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus, 1766)
23	Red-wattled Lapwing	<i>Vanelus indicus</i> (Boddaert, 1783)
24	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham, 1790)
25	Spotted Dove	<i>Streptopelia chinensis</i> (Scopoli, 1786)
26	Striated Babbler	<i>Turdoides turkei</i> (Blyth, 1844)
27	Striated Heron	<i>Butorides striata</i>
28	White-throated Kingfisher	<i>Halcyon sumrnerensis</i> (Linnaeus, 1758)

15 Appendix 5 Checklist of birds recorded by us in wetland (Maguri-Motapung Beel)

S.No.	Scientific name	Common Name
1	Asian Palm-Swift	<i>Cypsiurus balasiensis</i>
2	Barn Swallow	<i>Hirundo rustica</i> Linnaeus, 1758
3	Black Drongo	<i>Dicrurus macrocerus</i> Vieillot, 1817
4	Black-winged Kite	<i>Elanus caerules</i> (Desfontaines, 1789)
5	Blue Tailed Bee Eater	<i>Merops philippinus</i>
6	Bronze-winged Jacana	<i>Metopidius indicus</i> (Latham, 1790)
7	Cattle Egret	<i>Bubulcus ibis</i> (Linnaeus, 1758)
8	Cinnamon Bittern	<i>Ixobrychus cinnamomeus</i>
9	Cotton Pygmy-Goose	<i>Nettion coromandelianus</i> (Gmelin, 1789)
10	Gray-throated Martin	<i>Raparia chinensis</i>
11	Great Egret	<i>Ardea alba</i> Linnaeus, 1758
12	Intermediate Egret	<i>Ardea intermedia</i> Wagler, 1827
13	Jungle Myna	<i>Acridotheres fuscus</i> (Wagler, 1827)
14	Lesser Adjutant	<i>Leptoptilos javanicus</i> (Horsfield, 1821)
15	Lesser Whistling-Duck	<i>Dendrocygna javanica</i> (Horsfield, 1821)
16	Little Cormorant	<i>Microcarbo niger</i> (Vieillot, 1817)
17	Little Egret	<i>Egretta garzetta</i> (Linnaeus, 1766)
18	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i> (Scopoli, 1786)
19	Pied Kingfisher	<i>Ceryle rudis</i> (Linnaeus, 1758)
20	Indian Pond-Heron	<i>Ardeola grayii</i> (Sykes, 1832)
21	Gray-headed Swampphen	<i>Porphyrio poliocephalus</i> (Latham, 1801)
22	Red-wattled Lapwing	<i>Vanelus indicus</i> (Boddaert, 1783)
23	Shikra	<i>Accipiter badius</i> (Gmelin, 1788)
24	Indian Spot-billed Duck	<i>Anas poscibilorhyncha</i> Forster, 1781
25	White-throated Kingfisher	<i>Halkyon smyrnensis</i> (Linnaeus, 1758)
26	Yellow-bellied Prinia	<i>Prinia flaviventris</i> (Delessert, 1840)
27	Yellow Bittern	<i>Ixobrychus sinensis</i>
28	Zitting Cisticola	<i>Cisticola juncidis</i> (Rafinesque, 1810)

16 Appendix 6 Checklist of fishes captured from Dibru River and Maguri – Motapung Beel

Family	Scientific name	Common name	IUCN status	No. of Individual capture
Cyprinidae	<i>Cirrhinus reba</i> (Day 1878)	Reba carp	LC	4
	<i>Ostobryza cotia</i> (Hamilton 1822)		LC	7
	<i>Bangana dero</i> (Hamilton 1822)	Kalabans	LC	1
	<i>Puntius sophore</i> (Hamilton 1822)	Spot fin swamp barb	LC	6
	<i>Puntius chola</i> (Hamilton 1822)	Chola barb	LC	2
	<i>Pethia gelius</i> (Hamilton, 1822)	Golden dwarf barb	LC	4
	<i>Tarigilabeo latius</i> (Hamilton, 1822)	Gangetic latia	LC	1
	<i>Labeo calbasu</i> (Hamilton 1822)	Calbasu	LC	3
	<i>Labeo bata</i> (Hamilton, 1822)	Bata labeo	LC	2
	<i>Chagunius chagunio</i> (Hamilton, 1822)		LC	1
	<i>Sabnophasia bawaila</i> (Hamilton, 1822)	Large razorbelly minnow	LC	16
	<i>Chela labruca</i> (Hamilton, 1822)	Indian glass fish	LC	21
	<i>Barilius barna</i> (Hamilton, 1822)	Barna baril	LC	7
Gobiidae	<i>Glossogobius giuris</i> (Hamilton, 1822)	Tank gobi	LC	3
Bagridae	<i>Sperata aor</i> (Hamilton, 1822)	Long-whiskered catfish	LC	1
	<i>Sperata seenghala</i> (Sykes, 1839)	Gaint river catfish	LC	1
	<i>Mystus vittatus</i> (Bloch 1794)	Striped dwarf catfish	LC	6
	<i>Mystus cavasius</i> (Hamilton, 1822)	Gangetic mystus	LC	2
Belonidae	<i>Xenotodon canila</i> (Hamilton, 1822)	Freshwater garfish	LC	1
Ambassidae	<i>Parambassis ranga</i> (Hamilton 1822)	Indian glassy fish	LC	1
Channidae	<i>Channa marulius</i> (Hamilton 1822)	Gaint snake head	LC	6
	<i>Channa punctatus</i> (Hamilton 1822)	Spotted snake head	LC	4
Synbranchidae	<i>Monopterus albus</i> (Zuiew 1793)	Rice swamp eel	LC	1

17 Appendix 7 List of species of Butterflies sighted during the survey

Scientific Name	Common Name	IUCN status	IWPA Status
Family Papilionidae			
<i>Papilio nepheles</i>	Yellow Helen	Not Evaluated	
<i>Graphium sarpedon</i>	Common Bluebottle	Not Evaluated	
<i>Papilio demoleus</i>	Lime	Not Evaluated	
<i>Graphium agamemnon</i>	Tailed Jay	Not Evaluated	
<i>Papilio memnon</i>	Great Mormon	Not Evaluated	
<i>Troides atavus</i>	Golden Birdwing	Least Concern	
<i>Papilio castor</i>	Common Raven	Not Evaluated	
Family Nymphalidae			
<i>Ypthima baldus</i>	Common Fivering	Not Evaluated	
<i>Nymphis hylas</i>	Common Sailer	Not Evaluated	
<i>Junonia atlites</i>	Grey Pansy	Not Evaluated	
<i>Mycalesis persus</i>	Common Bushbrown	Not Evaluated	
<i>Ariadne merione</i>	Common Castor	Not Evaluated	
<i>Cethosia cyane</i>	Leopard Lacewing	Not Evaluated	
<i>Parantica aglea</i>	Glassy Tiger	Not Evaluated	
<i>Ariadne ariadne</i>	Angled Castor	Not Evaluated	
<i>Danaus genutia</i>	Common Tiger	Not Evaluated	
<i>Euploea core</i>	Common Indian Crow	Least Concern	

<i>Junonia almana</i>	Peacock Pansy	Least Concern	
<i>Tirumala limnius</i>	Blue Tiger	Not Evaluated	
<i>Euthalia aconthea</i>	Baron	Not Evaluated	
<i>Asthyra perius</i>	Common Sergeant	Not Evaluated	
<i>Hypolimnas bolina</i>	Great Eggfly	Not Evaluated	
<i>Danaus chrysippus</i>	Plain Tiger	Not Evaluated	
<i>Tanaecia lepidus</i>	Grey Count	Not Evaluated	Schedule II
<i>Tirumala septentrionis</i>	Dark blue tiger		
<i>Melanitis leda</i>	Common Evening Brown	Not Evaluated	
Family Lycaenidae			
<i>Castalius rosimon</i>	Common Pierrot	Not Evaluated	
<i>Jarvisia celena</i>	Common Cerulean	Not Evaluated	
<i>Hypolycaena erylus</i>	Common Tit	Not Evaluated	
<i>Surendra quercetorum</i>	Common Acacia Blue	Not Evaluated	
<i>Procotas nora</i>	Common Lineblue	Not Evaluated	
<i>Apharitis lilacinus</i>	Lilac Silverline		Schedule II
<i>Anthene byacantina</i>	Pointed Ciliate Blue	Not Evaluated	Schedule II
<i>Chilades lajus</i>	Lime Blue	Not Evaluated	
Family Riodinidae			
<i>Zemeros flegyas</i>	Punchinello	Not Evaluated	
Family Hesperidae			
<i>Aeromachus pygmaeus</i>	Pygmy Scrub Hopper	Not Evaluated	

<i>Ampitia dioxorides</i>	Bush Hopper	Not Evaluated	
Family Pieridae			
<i>Eurema blanda</i>	Three Spot grass yellow	Not Evaluated	
<i>Catopsilia pomona</i>	Common Emigrant	Not Evaluated	
<i>Eurema brigitta</i>	Small Grass Yellow	Least Concern	
<i>Delias dascomberi</i>	Redspot Jezebel	Not Evaluated	

18 Appendix 8 List of species of odonates sighted during the survey

Scientific Name	Common Name	IUCN status
<i>Orthetrum sabina</i>	Green marsh hawk	Least Concern
<i>Camacinia gigantea</i>	Giant forest skimmer	Least Concern
<i>Diplacodes nebulosa</i>	Black tipped ground skimmer	Least Concern
<i>Brachythemis contaminata</i>	Ditch Jewel	Least Concern
<i>Ictinogomphus</i> sp.1	Club tail	Least Concern
<i>Rhyothemis variegata</i>	Common picture wing	Least Concern
<i>Acisoma panorpoides</i>	Trumpet tail	Least Concern
<i>Crocothemis servilia</i>	Scarlet skimmer	Least Concern
<i>Ictinogomphus</i> sp.2	Club tail	Least Concern
<i>Neurothemis tullia</i>	Pied paddy skimmer	Least Concern
<i>Rurmogomphus</i> sp.	Club tail	Least Concern
<i>Pseudagrion</i> sp.	Dart	Least Concern
<i>Ceragrion coromandelianum</i>	Coromandel Marsh Dart	Least Concern

19 Appendix 9 List of herpetofaunal species encountered during the survey period

Date of encounter	Scientific Name	Common Name	Microhabitat	Status	Distance to the explosion site (km)
30/05/2020	<i>Rhabdophis subminiatus</i> (SCHLEGEL, 1837)	Red-necked keelback	Water puddle along river Lohit	Live	0.50
30/05/2020	<i>Varanus salvator</i> (LAURENTI, 1768)	Common Water Monitor	Forest along river Lohit	Live	0.75
02/06/2020	<i>Fowlea piscator</i> (SCHNEIDER, 1799)	Checkered Keelback	Grassland	Carcass	0.43
22/06/2020	<i>Fowlea piscator</i> (SCHNEIDER, 1799)	Checkered Keelback	River	Live	2.96
23/06/2020	<i>Ptyas mucosa</i> (LINNAEUS, 1758)	Oriental Ratsnake	Human Habitation	Live	5.19
23/06/2020	<i>Calotes versicolor</i> (DAUDIN, 1802)	Common Garden Lizard	Human habitation	Live	5.19
03/07/2020	<i>Hemidactylus frenatus</i> DUMÉRIL & BIBRON, 1836	Common House Gecko	Human habitation	Live (4)	3.70
04/07/2020	<i>Baiga siamensis</i> NUTAPHAND, 1971	Eyed Cat Snake	Human habitation	Live	5.19

04/07/2020	<i>Duttaphrynus melanostictus</i> (Schneider, 1799)	Asian Common Toad	Human habitation	Live	5.19
05/07/2020	<i>Hemidactylus frenatus</i> DUMÉRIL & BIBRON, 1836	Common House Gecko	Human habitation	Live (2)	1.69
06/07/2020	<i>Calotes versicolor</i> (DAUDIN, 1802)	Common Garden Lizard	Human habitation	Live	2.95
06/07/2020	<i>Fowlea piscator</i> (SCHNEIDER, 1799)	Checkered Keelback	River	Live	4.56
06/07/2020	<i>Fowlea piscator</i> (SCHNEIDER, 1799)	Checkered Keelback	Wetland	Carcass	5.16
09/07/2020	<i>Euphlyctis cyanophlyctis</i> (Schneider, 1799)	Common skittering frog	Human habitation	Live (2 individuals)	5.19

20 Appendix 10 List of herpetofauna found in this area

	Species	Common name	Locality Records	Status	Reference
TURTLES					
1.	<i>Nilssonia gangetica</i> (Cuvier 1825)	Gangetic Softshell Turtle	Laika	Vulnerable	Choudhury (1995)
2.	<i>Nilssonia nigricans</i> (Anderson, 1875)	Black Soft-shell Turtle	Dibrugarh	Critical	Paschang and Gemel (2002)
3.	<i>Nilssonia hurum</i> (Gray, 1831)	Peacock Soft-shell	Dibru-Saikhowa National Park	Vulnerable	Choudhury (1998)
4.	<i>Chitra indica</i> (Gray, 1831)	Narrow headed Soft-shell Turtle	Dibru-Saikhowa National Park	Endangered	Choudhury (1998)
5.	<i>Lissemys punctata</i> (Bonnaterre, 1789)	Indian Flapshell Turtle	Maguri Beel	Schedule I	Pers. Obs. (Dr. Abhijit Das, 2009)
6.	<i>Pangshura sylhetensis</i> Jerdon, 1870	Assam Roofed Turtle	Dibru-Saikhowa National Park	Endangered	Choudhury (1998)
7.	<i>Pangshura tentoria</i> (Gray, 1834)	Indian Tent Turtle	Baluchar, Saikhowaghat,	Not Evaluated	Ahmed and Das (2010), Choudhury (1995)

			Rohmonia, Guijan		
8.	<i>Pangshura tecta</i> (Gray, 1831)	Indian Roofed Turtle	Dibru Nallah	Schedule I	Ahmed and Das (2010)
9.	<i>Pangshura smithii</i> (Gray, 1863)	Brown Roofed Turtle	Saikhowaghat	Not Evaluated	Choudhury (1995)
10.	<i>Geodemys hamiltonii</i> (Gray, 1831)	Pond Turtle	Kaloumi Camp	Vulnerable	Pers. Obs. (Dr. Abhijit Das, 2009)
11.	<i>Cyclemys gemeli</i> Fritz, Guicking, Auer, Sommer, Wink & Hundsdorfer, 2008	Assam Leaf Turtle	Guijan, Rohmoria	Not Evaluated	Choudhury (1995)
12.	<i>Cuora ambainensis</i> (Daudin, 1802)	Malayan Box Turtle	Dibru-Saikhowa National Park	Vulnerable	Choudhury (1995)
13.	<i>Melanochelys tricarinata</i> (Blyth, 1856)	Tricarinate Turtle	Dibru-Saikhowa National Park	Endangered	Ahmed and Das (2010)
LIZARDS					
1.	<i>Calotes versicolor</i> (Daudin, 1802)	Indian Garden Lizard	Dibru-Saikhowa National Park, Baghjan	Not Evaluated	Mathur (2018), Bhagjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)

2.	<i>Eutropis macularia</i> (Blyth, 1853)	Bronze Grass or Little Sun Skink	Dibru- Saikhowa National Park, Baghjan	Not Evaluated	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
3.	<i>Eutropis multifasciata</i> (Kuhl, 1820)	Many-lined Grass Skink	Dibru- Saikhowa National Park, Baghjan	Least Concerned	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
4.	<i>Gekko gecko</i> (Linnaeus, 1758)	Tokay Gecko	Dibru- Saikhowa National Park, Baghjan	Not Evaluated	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
5.	<i>Hemidactylus frenatus</i> Duméril & Bibron, 1836	Asian House Gecko	Dibru- Saikhowa National Park, Baghjan	Least Concerned	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
6.	<i>Lygosoma albopunctatum</i> (Gray, 1846)	White spotted Supple Skink	Dibru- Saikhowa National Park, Baghjan	Not Evaluated	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
7.	<i>Varanus bengalensis</i> (Daudin, 1802)	Bengal Monitor	Dibru- Saikhowa	Schedule I	Mathur (2018), Baghjan confirmed by Pers. Comm.

			National Park, Baghjan		(Dr. Firoz Ahmed, Aaranyak, Assam)
8.	<i>Varanus salvator</i> (Laurenti, 1768)	Water Monitor	Guijan, Dibru- Saikhowa National Park	Schedule I	Choudhury (1998)
	SNAKES				
1.	<i>Python bivittatus</i> Kuhl, 1820	Burmese Rock Python	Laika, kaloumi	Schedule I	Pers. Obs. (Dr. Abhijit Das, 2009)
2.	<i>Pareas monticola</i> (Cantor 1839)	Assam Snail Eater	Dibru- Saikhowa National Park	Schedule IV	Pers. Obs. (Dr. Abhijit Das, 2009)
3.	<i>Dendrelaphis pictus</i> (Gmelin, 1789)	Painted Bronzeback Tree Snake	Dibru- Saikhowa National Park	Not Evaluated	Mathur (2018)
4.	<i>Enhydris enhydris</i> (Schneider, 1799)	Smooth Water Snake	Maguri Beel	Schedule IV	Pers. Obs. (Dr. Abhijit Das, 2009)
5.	<i>Fowlea piscator</i> (Schneider, 1799)	Checkered Keelback	Kalumi	Schedule II	Pers. Obs. (Dr. Abhijit Das, 2009)
6.	<i>Xenochrophis cerasogaster</i> (Cantor, 1839)	Glossy Bellied Mash Snake	Maguri Beel	Schedule IV	Pers. Obs. (Dr. Abhijit Das, 2009)
7.	<i>Rhabdophis subminiatus</i> (Schlegel, 1837)	Red Necked Keelback	Laika, Dodhia	Schedule IV	Pers. Obs. (Dr. Abhijit Das, 2009)

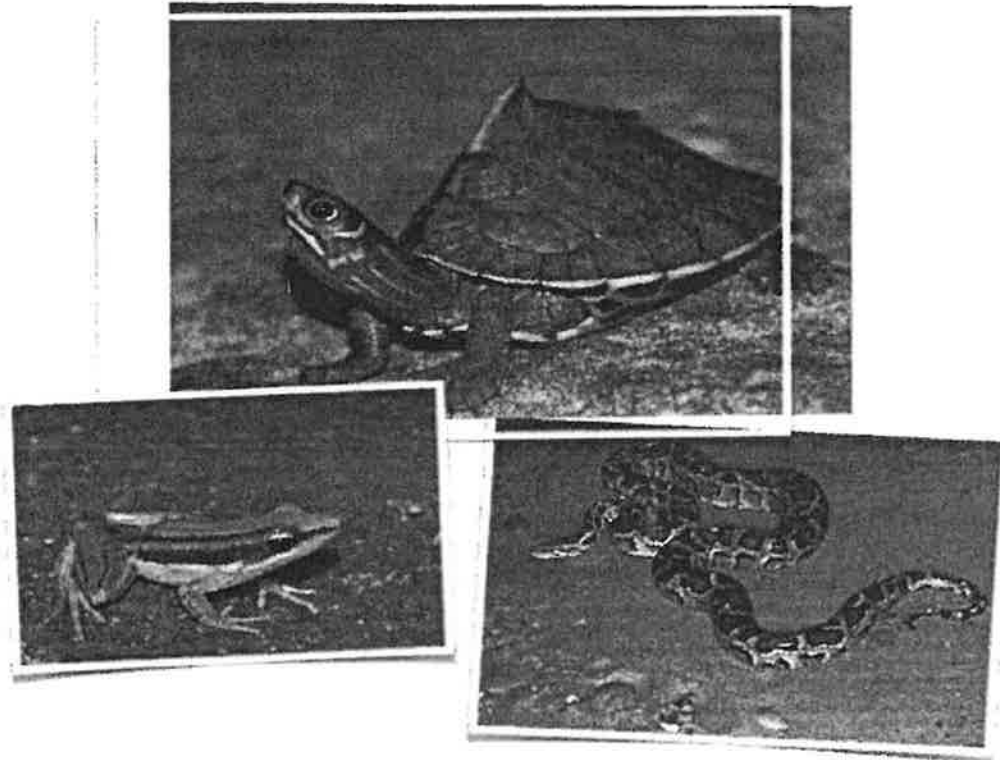
8.	<i>Oligodon albocinctus</i> (Cantor, 1839)	White-Barred Kukri Snake	Dibru-Saikhowa National Park	Not Evaluated	Mathur (2018)
9.	<i>Ophiophagus hannah</i> (Cantor, 1836)	King Cobra	Guijan, Dibru-Saikhowa National Park	Schedule II	Pers. Obs. (Dr. Abhijit Das, 2009), Choudhury (1998)
10.	<i>Bungarus fasciatus</i> (Schneider, 1801)	Banded Krait	Guijan, Koloumi	Schedule IV	Pers. Obs. (Dr. Abhijit Das, 2009)
11.	<i>Bungarus niger</i> Wall, 1908		Dibrugarh and Sadiya, Sibsagar	Not Evaluated	Das (2018)
	AMPHIBIANS				
1.	<i>Duttaphrynus melanostictus</i> (Schneider, 1799)	Asian Common Toad	Dibru-Saikhowa National Park, Baghjan	Least Concerned	Mathur (2018), Bhagjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
2.	<i>Hoplobatrachus crassus</i> (Jerdon, 1854)	Jerdon's Bull Frog	Laika	Schedule IV	Das and Sengupta (2009)
3.	<i>Hoplobatrachus tigerinus</i> (Daudin, 1802)	Indian Bull Frog	Maguri Beel	Schedule IV	Das and Sengupta (2009)
4.	<i>Fejervarya pierrei</i> (Dubois, 1975)	Pierre's Cricket Frog	Guijan	Not Evaluated	Das and Sengupta (2009)
5.	<i>Euphlyctis cyanophlyctis</i> (Schneider, 1799)	Skittering Frog	Maguri Beel, Koloumi	Schedule IV	Das and Sengupta (2009)

6.	<i>Hydrophylax leptoglossa</i> (Anderson, 1871)	Assam Forest Frog	Guijan	Schedule IV	Das and Sengupta (2009)
7.	<i>Humerana humeralis</i> (Boulenger, 1887)	Bhamo Frog	Dibru-Saikhowa National Park	Schedule IV	Das and Sengupta (2009)
8.	<i>Hylarana tyleri</i> Theobald, 1868	Leaf Frog	Koloumi Camp	Not Evaluated	Das and Sengupta (2009)
9.	<i>Chirimentis simus</i> (Annandale, 1915)	Annandale's Pigmy Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
10.	<i>Philautus vittatus</i> (Boulenger, 1887)	Two Striped	Dodhia village	Least Concerned	Das and Sengupta (2009)
11.	<i>Rhacophorus bipunctatus</i> Ahl, 1927	Twin Spotted Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
12.	<i>Rhacophorus smaragdinus</i> Blyth, 1852	Large Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
13.	<i>Polypedates teraiensis</i> (Dubois, 1987)	Terai tree frog	Laika, Dodhia	Least Concerned	Das and Sengupta (2009)
14.	<i>Uperodon globulosus</i> (Gunther, 1864)	Indian Balloon Frog	Guijan	Least Concerned	Das and Sengupta (2009)
15.	<i>Hylarana taipehensis</i> (Van Denburgh, 1909)	Taipeh Frog	Dibru-Saikhowa	Least Concerned	Mathur (2018), Bhagian confirmed by Pers. Comm.

			National Park, Baghjan		(Dr. Firoz Ahmed, Aaranyak, Assam)
16.	<i>Microhyla omata</i> (Dumeril and Bibron, 1841)	Ornamented Pygmy Frog	Dibru- Saikhowa National Park, Baghjan	Least Concerned	Mathur (2018), Baghjan confirmed by Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)
17.	<i>Minervarya syhadrensis</i> (Annandale, 1919)	Southern Cricket Frog	Baghjan	Least Concerned	Pers. Comm. (Dr. Firoz Ahmed, Aaranyak, Assam)

21 Appendix 11 Checklist of Herpetofauna (Source: Ahmed & Das, 2020)

**Wetland associated
Herpetofauna
in Dibru- Saikhowa National Park, Assam**



Species	Common name	Locality Records	Status	Reference
TURTLES				
<i>Nilssonina gangeticus</i>	Gangetic Turtle	Softshell Laika	Vulnerable	Choudhury (1995)
<i>Nilssonina nigricans</i>	Black Soft-shell Turtle	Dibrugarh	Critical	Paschang and Gemel (2002)

<i>Nilssonia hurum</i>	Peacock Soft-shell	Dibru-Saikhowa National Park	Vulnerable	Choudhury (1998)
<i>Chitra indica</i>	Narrow headed Soft-shell Turtle	Dibru-Saikhowa National Park	Endangered	Choudhury (1998)
<i>Lissemys punctata andersoni</i>	Indian Flapshell Turtle	Maguri Beel	Schedule I	Das (2009)
<i>Pangshura sylhetensis</i>	Assam Roofed Turtle	Dibru-Saikhowa National Park	Endangered	Choudhury (1998)
<i>Pangshura tentoria</i>	Indian Tent Turtle	Baluchar, Saikhowaghat, Rohmonia, Guijan	Not Evaluated	Ahmed and Das (2010), Choudhury (1995)
<i>Pangshura tecta</i>	Indian Roofed Turtle	Dibru Nallah	Schedule I	Ahmed and Das (2010)
<i>Pangshura smithii</i>	Brown Roofed Turtle	Saikhowaghat	Not Evaluated	Choudhury (1995)
<i>Geoclemys hamiltonii</i>	Pond Turtle	Kaloumi Camp	Vulnerable	Das (2009)
<i>Cycllemys gemell</i>	Assam Leaf Turtle	Guijan, Rohmonia	Not Evaluated	Choudhury (1995)
<i>Cuora amboinensis</i>	Malayan Box Turtle	Dibru-Saikhowa National Park	Vulnerable	Choudhury (1995)
<i>Melanochelys tricarinata</i>	Tricarinate Turtle	Dibru-Saikhowa National Park		Ahmed and Das (2010)

LIZARDS

<i>Varanus salvator</i>	Water Monitor	Guijan, Dibrusaikhowa National Park	Schedule I	Choudhury (1998)
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Species	Common name	Locality Records	Status	Reference
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SNAKES

<i>Python bivittatus</i>	Burmese Python	Rock Laika, Kaloumi	Schedule I	Das (2009)
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<i>Pareas monticola</i>	Assam Snail Eater	Dibru-Saikhowa National Park	Schedule IV	Das (2009)
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<i>Enhydryis enhydryis</i>	Smooth Water Snake	Maguri Beel	Schedule IV	Das (2009)
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<i>Fowlea piscator</i>	Checkered Keelback	Kaloumi	Schedule II	Das (2009)
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<i>Xenochrophis cerasogaster</i>	Glossy Bellied Snake	Mash Maguri Beel	Schedule IV	Das (2009)
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<i>Rhabdophis subminiatus</i>	Red Keelback	Necked Laika, Dodhia	Schedule IV	Das (2009)
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<i>Ophiophagus hannah</i>	King Cobra	Guijan, Dibrusaikhowa National Park	Schedule II	Das (2009), Choudhury (1998)
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<i>Bungarus fasciatus</i>	Banded Krait	Guijan, Koloumi	Schedule IV	Das (2009)
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AMPHIBIANS

<i>Hoplobatrachus crassus</i>	Jerdon's Bull Frog	Laika	Schedule IV	Das and Sengupta (2009)
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<i>Hoplobatrachus tigerinus</i>	Indian Bull Frog	Maguri Beel	Schedule IV	Das and Sengupta (2009)
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<i>Fejervarya pierrei</i>	Pierre's Cricket Frog	Guijan	Not Evaluated	Das and Sengupta (2009)
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<i>Euphlyctis cyanophlyctis</i>	Skittering Frog	Maguri Beel, Koloumi	Schedule IV	Das and Sengupta (2009)
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<i>Hydrophylax leptoglossa</i>	Assam Forest Frog	Guijan	Schedule IV	Das and Sengupta (2009)
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<i>Humerana humeralis</i>	Bhamo Frog	Dibru-Saikhowa National Park	Schedule IV	Das and Sengupta (2009)
<i>Hylarana tytleri</i>	Leaf Frog	Koloumi Camp	Not Evaluated	Das and Sengupta (2009)
Species	Common name	Locality Records	Status	Reference
<i>Chiromentis simus</i>	Pigmy Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
<i>Feihyla vittatus</i>	Two Striped Pigmy Tree Frog	Dodhia village	Least Concerned	Das and Sengupta (2009)
<i>Rhacophorus bipunctatus</i>	Twin Spotted Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
<i>Rhacophorus smaragdinus</i>	Large Tree Frog	Dibru-Saikhowa National Park	Least Concerned	Das and Sengupta (2009)
<i>Polypedates teraiensis</i>	Terai tree frog	Laika, Dodhia	Least Concerned	Das and Sengupta (2009)
<i>Uperodon globulosus</i>	Indian Balloon Frog	Guijan	Least Concerned	Das and Sengupta (2009)

References

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22 Appendix 12 Post Mortem report of Ganges River Dolphin

MVD/F-13/2020/04

Dated: 12/06/2020

To

The Range Forest Officer

Guijan WL range

Guijan, Tinsukia-Assam

Subject: Regarding submission of Post mortem Report of Gangetic River Dolphin (Platanista gangetica) on 29-05-2020

(Ref: Letter No. GWL/70/2020/130 and dated on 29-05-2020)

Sir,

In reference to the subject cited above hereby would like to inform you that as per your request for Post Mortem Examination by letter no. GWL/70/2020/130 dated on 29-05-2020 . we have jointly carried out the post mortem examination along with Veterinary Surgeon of Mobile Veterinary Service-Eastern Assam ,Wildlife Trust Of India at my State Veterinary Dispensary , Tinsukia ,Govt. Of Assam on 29-05-2020 .

Hereby submitting the Post mortem Report for your kind consideration and necessary action.

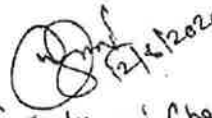
Attached herewith: PM Report of Gangetic River Dolphin.

Thanking you.

Yours sincerely

Date: 12/6/2020

Place: Tinsukia


(Tribhuvan Choudhary)
Wildlife Trust of India
Veterinary Surgeon
Mobile Veterinary Service - Eastern Assam
Regn. No. 006685 (VCI)


Dr. P. C. Dutta
Vety Officer
Mobile Vety. Dispensary
TINSUKIA
Mobile No-9435136478

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Page 1 of 4

RECORD OF NECROPSY EXAMINATION

NAME OF PROTECTED AREA/ZOO Maguri Beel
 NAME OF SPECIES with scientific name Gangetic River dolphin (*Platanista gangetica*)
 AGE (approx) 2 months SEX Male AMBIENT TEMPERATURE in 'C' (at the time of acquisition) _____
 DATE OF NECROPSY 29/05/2020 DATE AND TIME OF DEATH (estimated) 24-48 hours old carcass
 TIME OF ACQUISITION OF CARCASS _____ TIME OF DISPOSAL OF CARCASS 30/05/2020
 GPS LOCATION AT PLACE OF DEATH & PLACE OF NECROPSY (if different) N 27° 34' 22.15" / E 95° 22' 8.34" and N 27° 29' 33" / E 95° 21' 42"
 AREA DESCRIPTION (topography, water source etc.) Area is Maguri Beel Misting area, carcass found in water body of the Beel

I. HISTORY OF DEATH

- Brief History: The gangetic river dolphin was found dead in Maguri Beel water just below the Maguri beel Bridge.
- Observation of the surroundings: _____
- Other relevant information: There was a gas well blowout incident at Baghjan - BGR-05 well as per information given by local people and forest staff on 27/05/2020

II. EXTERNAL EXAMINATION

PHYSICAL CONDITION: Normal * Fat * Thin * Emaciated * RIGOR MORTIS No
 SUPERFICIAL LYMPH GLANDS: No MUCOUS-MEMBRANE _____
 NATURAL ORFICES: NAD BODY WEIGHT in kg (approx) 6.510 kg
 BODY LENGTH in cm 89 cm TAIL LENGTH in cm _____
 (nose to tip of tail) (base of tail to tip of tail)
 HEIGHT AT WITHERS in cm _____ CHEST GIRTH in cm _____
 STATE OF CARCASS: Fresh * Refrigerated * Deep Frozen * Decomposed * Incomplete *
 STATE OF DECOMPOSITION: Fresh * Bloated * Active decay * Advanced decay *
 DESCRIPTION OF WOUNDS/INJURIES, if any No
 OTHER REMARKABLE OBSERVATIONS, if any No

Vital Measurements (whichever applicable):-

Rt. FORE FOOT-PAD GIRTH & LENGTH X BREADTH in cm (carnivores) N/A
 LENGTH OF CANINE TEETH in cm (carnivores): Upper Right _____ Upper Left _____ Lower Left _____ Lower Right _____
 Rt. FORE FOOT-PAD CIRCUMFERENCE in cm (elephant) N/A
 LENGTH & CIRCUMFERENCE (at base) OF BOTH TUSK/TUSH in cm (elephant) N/A
 OTHERS (Length of Antler/Horn, Length & circumference of Rhinoceros Horn, etc.) N/A

Death SL No _____
 Horn SL No _____

INTERNAL EXAMINATION

A. SKIN SUBCUTANEOUS TISSUE & BURN LES		Distal skin layer got removed
B. BODY CAVITIES		} NAD
1. POSITION OF VISCERAL ORGANS 2. PERITONEAL CAVITY 3. PLEURAL CAVITY AND PLEURA		
C. RESPIRATORY SYSTEM		} NAD Lungs show haemorrhages and edematous
1. LARYNX 2. TRACHEA 3. BRONCHI AND BRONCHIOLES 4. LUNGS (Appearance, colour & consistency) 5. LYMPH GLANDS 6. DIAPHRAGM		
D. HEPATIC SYSTEM		} NAD Shows haemorrhages on 1/3 parenchyma
1. LIVER (Appearance) 2. LIVER TISSUE 3. GALL BLADDER & DUCTS 4. LYMPH GLANDS		
E. CIRCULATORY & LYMPHATIC SYSTEM		} Shows haemorrhage Presence of clotted blood observed } Haemorrhage observed
1. PERICARDIAL SAC 2. HEART MUSCLE 3. HEART CHAMBERS 4. LARGE BLOOD VESSELS 5. SMALL BLOOD VESSELS (Microscopic) 6. SPLEEN (Appearance, size, colour) 7. SPLEENIC TISSUE		
F. DIGESTIVE TRACT		} NAD
1. PHARYNX 2. ESOPHAGUS		
3. STOMACH (Simple) (Compound)	i. Cardiac zone ii. Fundus iii. Pylorus	} Haemorrhage observed
	i. Rumen ii. Reticulum iii. Omasum iv. Abomasum	
4. SMALL INTESTINE	i. Duodenum ii. Jejunum iii. Ileum	} Haemorrhage observed

J. LARGE INTESTINES		i. Caecum	} Haemorrhages and congestion Absence
		ii. Colon	
		iii. Rectum	
K. LYMPH GLANDS (Mesenteric)			} (NAD)
G. UROGENITAL ORGANS			
1. KIDNEYS (Colour and appearance)			Congestion
2. URINARY BLADDER			} (NAD)
3. REPRODUCTIVE ORGANS		i. Testes/penis/Glands	} (NAD)
		ii. Ovary/Uterus/Vagina	
H. ADRENALS:			
(NAD)			
I. HEAD:			
1. BUCCAL & NASAL CAVITIES			Pale in colour
2. TONGUE			→ Pale in colour
3. BRAIN & SPINAL CORD			→ Congestion
J. SKELETON			

IV. SUMMARY OF MAJOR FINDINGS


1. Heart shows haemorrhages and ventricular damage
2. Lungs shows haemorrhage and edema
3. Stomach, intestinal lumen shows haemorrhage
4. Brain shows congestion

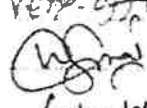
Sl. No.	Sample	Preservative used	Examination required	Laboratory Address
1	Heart	Salt solution, formalin	Toxic gas anal	1) Directorate of Forensic Science
2	Liver	and in ice	Hydrocarbonages	2) NIKSPL, Bangalore
3	Lungs	- do -	Viral and Bacterial	
4	Kidney	- do -	uptake's Patho histo	3) Centre of Veterinary Science
5	Stomach with contents	- do -	logical and chemistry	Microbiology and Anatomy
6	Intestine with contents	- do -		
7	Heart Blood	EDTA		
8				
9				
10				

V PROVISIONAL DIAGNOSIS

As per postmortem examination, there are changes observed in lungs, heart, liver, kidney, brain and gastro intestinal tract. Considering the involvement of vital organs and extensive haemorrhages in gastro-intestinal tract death may be due inhalation or ingestion of substance of toxic origin leading to hypoxia and death. This is only a tentative conclusion on cause of death. For any confirmatory and differential diagnosis further advanced laboratory test must be done by competent authority.

Place State Veterinary Disp. Tinsukia
Date 12/06/2020

1. Signature  Dr. P. C. Dutta
 Veterinarian's name Dr. P. C. Dutta
 Designation Veto. Officer, Mobile Vety. Dispensary TINSUKIA, Assam. Mobile No. 9435138478

2. Signature 
 Veterinarian's name (Dr. Anshu Chandra)
 Designation Veterinary Surgeon / Asst. Manager Wildlife Trust India, Veterinary Surgeon, Mobile Veterinary Service - Eastern Assam, Regn. No. 006685 (VCI) / 21.02 (one)

Note: Attach a rough sketch of the area duly signed by the competent authority

**23 Appendix 13 World Health Organization (WHO)
Guidelines for noise based on the lowest levels of noise that
affect health**

Specific Environment	Time Base (hours)	Critical health effect(s)	Standard limits as per WHO guidelines	
			LAeq [dB]	L _{Amax} , fast [dB]
Outdoor living area	16	Serious annoyance, daytime and evening Moderate annoyance, daytime and evening	50 55	-
Dwelling, indoors, Inside bedrooms	16	Speech intelligibility and moderate annoyance, daytime and evening Sleep disturbance, night-time	35 30	-
Outside bedrooms	8	Sleep disturbance, window open (outdoor Values)	45	60
School class rooms and pre-schools, indoors	During class	Speech intelligibility, disturbance of information extraction, message communication	35	-
Pre-school bedrooms, indoors	Sleeping time	Sleep disturbance	30	45
School, playground outdoor	During play	Annoyance (external source)	55	-

Hospital, ward rooms, indoors	8	Sleep disturbance, night-time	30	40 -
	16	Sleep disturbance, daytime and evenings	30	
Hospitals, treatment rooms, indoors	-	Interference with rest and recovery	As low as possible	-
Industrial, commercial, shopping and traffic areas, indoors and outdoors	24	Hearing impairment	70	110
Ceremonies, festivals and entertainment events	4	Hearing impairment (patrons: <5 times/year)	100	110
Public addresses, indoors and outdoors	1	Hearing impairment	85	110
Music through headphones/earphones	1	Hearing impairment (free-field value)	85 (under headphones, adapted to free-field values)	110
Impulse sounds from toys, fireworks and firearms	-	Hearing impairment (adults) Hearing impairment (children)	-	120-140 (peak sound pressure (not LAmax, fast), measured 100 mm from the ear)

Outdoors in parkland and conservation areas		Disruption of tranquillity	existing quiet outdoor areas should be preserved and the ratio of intruding noise to natural background sound should be kept low	
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----- End of Report -----



APPENDIX B (COLLY)
Pollution Control Board, Assam
 (Department of Environment & Forests : : Government of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
 (অসম চৰকাৰৰ বন আৰু পৰিবেশ বিভাগ)

No. WB/Z-I/T-879/94-95/616 /46

Dated Guwahati the, 10th June, 2020

To

The Resident Chief Executive
 M/s Oil India Ltd. (OIL)
 Duliajan, Pin-786602
 Dist.: Dibrugarh (Assam).

Sub: SHOW CAUSE NOTICE.

WHEREAS, you are operating your production as well as drilling activities through various installations located at different parts of upper Assam Region;

WHEREAS, you have been operating your above said activities without obtaining prior Consent to Establish / Consent to Operate from Pollution Control Board, Assam which is a serious violation of the provision of Water Act, 1974, Air Act, 1981 as well as Environment (Protection) Act, 1986;

WHEREAS, it is seen that you have been operating your production as well as drilling installations without having proper safety & precautionary measures for which often major accidents are occurred at the drill sites;

WHEREAS, the recent incident of gas leakage from the Well No. BGN-5 and subsequently blast of fire at the said well of Baghjan Oil Field in Tinsukia district, shows the negligence and carelessness of the authority of M/s OIL, Duliajan, towards safety of people's life & property in neighbouring area as well as protection of Environment;

NOW THEREFORE, under the above facts & circumstances, Pollution Control Board, Assam is constrained to inform you that, you have nonchalantly violated the provisions of law-in-force, causing pollution to the Environment and in exercising of power conferred upon it, you are hereby directed to SHOW CAUSE within 7 (seven) days from the date of issue of this letter, why penal action shall not be initiated against you for not obtaining prior Consent to Establish / Consent to Operate from Pollution Control Board, Assam for your production / drilling operations.

[Signature]

Member Secretary (i/c)

Dated Guwahati the, 10th June, 2020

Memo No. WB/Z-I/T-879/94-95/616-A,

Copy to:

1. The Principal Secretary to the Govt. of Assam, Environment & Forests Department, Dispur, Guwahati-6 for favour of kind information.
2. The Deputy Commissioner, Tinsukia district for favour of kind information.
3. PA to the Chairman, PCBA for kind appraisal of the Hon'ble Chairman.
4. The Regional Executive Engineer (i/c), Regional Office, Dibrugarh, PCBA for information & necessary action.

Member Secretary (i/c)

Head Office : Bamunimaidam, Guwahati - 781021, Assam : India.
 Phone : 2652774 & 2550258 ; Fax : 0361-2550259 ; Gram : POLLUTIONCONTOL
 E-mail : membersecretary@pcbassam.org; Website : www.pcbassam.org
 Regional Offices at : Dibrugarh, Golaghat, Sibsagar, Tezpur, Guwahati, Bongaigaon, Nagaon & Silchar.



ऑयल इंडिया लिमिटेड
(भारत सरकार का कर्म)
Oil India Limited
(A Government of India Enterprise)

Safety & Environmental Department
P.O. DULIAJAN-786602,
ASSAM, INDIA
Phone: 0374-2800542
Fax : 0374-2861796
Email: safety@oilindia.in

Ref No. S&E/E/121/814

Date: 19.06.2020

The Member Secretary,
Pollution Control Board, Assam
Bamunimaidan, Guwahati-21

Sub: Show Cause Notice

Ref. (i) Your letter ref. No. WB/Z-1/T-879/94-95/616 dated Guwahati the 10th June 2020.

(ii) Our mail dated 17.06.20120 requesting for Extension of Show Cause Notice Reply

Sir,

We are in receipt of the above referred letter wherein "Show Cause Notice" was served to Oil India Limited and directed to reply within 7 days from the date of issue of this letter showing the cause

Quote- "why penal action should not be initiated against you for not obtaining prior Consent to Establish/Consent to Operate from Pollution Control Board, Assam for your production/drilling operations"

Unquote:

View above, as directed, we furnish our reply as follows for your information and kind consideration:

1. As stated in your above referred letter, we agree that Oil India Limited is operating its various production and drilling installations which are located at different parts of Upper Assam region.
2. Oil India Limited is fully committed to the compliance of various Acts, Rules & Regulations applicable to its E&P activities. Regarding operation of activities without obtaining prior Consent to Establish/Consent to Operate under the provision of Water Act, 1974, Air Act 1981 as well as Environment (Protection) Act, 1986, we would like to inform you that Oil India Limited had always been regularly applying for Consent to Establish and Consent to Operate NOCs from the State Pollution Control Board of Assam. Necessary applicable fees for the purpose were also fully deposited to the State PCB. Further, in many cases, fees were deposited with due concurrence of the Regional PCB, Dibrugarh. However, though Consent NOCs were applied regularly, sometimes the Consent NOC's was not issued by the Pollution Control Board, Assam.

3. OIL INDIA LIMITED is conducting its E&P activities following the Good International Petroleum Industry Practices (GIIP) followed worldwide, Norms and Standards of the various Regulatory & Statutory Bodies of the country (DOMS, MoEF&CC, OISD, CPCB/State PCB, PESO etc.). The installations & establishments are regularly being inspected by DGMS (Regulatory Agency under the Ministry of Labour and Employment, Govt. of India for safety in Mines and Oil-Fields) and OISD (the technical advisory body who formulates and implements the safety Standards of the Oil Industry) and activities are regularly being monitored/audited by the said regulatory bodies. Thus, operation of our production as well as drilling installations are having proper safety measures.
4. Regarding recent incident of gas leakage and subsequently blast of fire at the said well no. BGN#5 in Baghjan Oil field of Oil India Limited located in Tinsukia District, we would like to inform you that occurrence of such type of incident (blow out) is very rare and unfortunate. However, from the worldwide history of E&P activities, occurrence of such type of blowout incidents cannot be completely ruled out, though rarely occurs. Regarding "negligence and carelessness of the authority of M/s OIL, Duliajan towards safety of people's life & property in neighbouring area as well as protection of Environment" as quoted in your referred letter, we would like to furnish the followings in the reply:

Statutory Clearances:

- (i) State Govt. of Assam with prior approval from the Ministry of Petroleum and Natural Gas, Govt. of India granted Petroleum Mining Lease (PML) to M/s Oil India Limited (OIL) for carrying out E&P activities w.e.f. 14.05.2003 (Copy enclosed-Annexure-1) and since then OIL is operating in the area.
- (ii) The Ministry of Environment, Forest & Climate Change (MoEF&CC) published Environmental Impact Assessment Gazette Notification on 14th September, 2006 and since then OIL initiated process of obtaining Environmental Clearance (EC) from the Ministry of Environment, Forest and Climate Change (MoEF&CC). The Environmental Clearance for drilling wells in North Hapjan-Tinsukia-Dhola EC Block covering Baghjan Oilfield was obtained in the year 2011 (refer. MoEF&CC File Ref. No. J-11011/1255/2007-IA II (I)) dated 1st November 2011 (copy enclosed Annexure-2) and similarly, Environmental Clearances for setting up of Production Installations were obtained vide EC ref. Nos J-11011/463/2008-IA II (I) dated 16th January 2012 & Nos J-11011/463/2008-IA II (I) dated 12th January 2011 & J-11011/882/2008-IA II (I) dated 17th June 2013 (Copy enclosed, Annexure-3).
- (iii) NBWL clearances, as per Specific Environmental Clearance condition, were obtained for setting up of the production installations including laying of pipelines (refer. Sl.No.2/2.1 (2) of the Minutes of 2nd Meeting of Standing Committee of NBWL, P. No. 6-43/2007 WL-I (pt) dated 2nd January 2013; Ref. Sl. No. 1 of the Minutes of 3rd Meeting of Standing Committee of NBWL, P. No. 6-47/2014 WL dated 03.12.2014). Copies of the NBWL clearance are enclosed as Annexure-4.

- (iv) The Baghjan BGN#5 well (known as Loc. TN during drilling stage) was drilled in the year Nov 2006. Consent application (for Consent to Establish & Consent to Operate) for Drilling of 33 nos. drilling wells at different areas including drilling of Loc.TN (well No. BGN#5) well was submitted to the Regional Office, Pollution Control Board, Assam vide OIL letter dated S&E/E/20/723 dated 05.07.2006. Requisite fee against the referred Consent application was deposited vide our letter ref. no. S&E/E/20/992 dated 12.09.2006 (Demand Draft No. 085532 dated 09.08.2006).
- (v) The Baghjan EPS was put in operation on 13.06.2008. Consent application of the Production Installations was submitted to the Regional Office, Pollution Control Board, Dibrugarh, Assam vide OIL letter ref. no. S&E/E/20/769 dated 30.06.2008. That application covered the Baghjan EPS, the production installation located at Baghjan Oilfield. Requisite fee against the referred Consent application was deposited vide our letter ref.No. S&E/E/20/867 dated 22.07.2008 (DD No. 152451 dated 14.07.2008) as advised by the Regional Office, PCBA, Dibrugarh (letter ref. No. RO/DBR/T-721/95-96/300 dated 30th June 2008) and NOC was issued by the PCBA (ref. No. WB/Z-1/T-877/94-95/192/854 dated Guwahati the 09.03.2009 (copy enclosed, Annexure-5).
- (vi) OIL had been regularly applying for Consent to Operate for its Drilling wells & Production Installations. The details of the Consent applications, applicable to BGN#5 (Loc. TN) and Baghjan EPS, submitted by OIL given below for ready reference:

Sl No	Year	Application Ref No	Status of Consent	Remarks
1	2006-07	OIL letter dated S&E/E/20/723 dated 05.07.2006	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/992 dated 12.09.2006 (Demand Draft No. 085532 dated 09.08.2006).
2	2008-09	OIL letter ref. no. S&E/E/20/769 dated 30.06.2008	Consent obtained, ref. No. WB/Z-1/T-877/94-95/192/854 dated Guwahati the 09.03.2009	
3	2009-10	OIL letter ref. no. S&E/E/20/825 dated 18.07.2009	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/880 dated 01/08/2009 (Demand Draft No. 177962 dated 18.07.09).

4	2010-11	9 OIL letter ref. no. S&E/E/2 0/499 dated 30.04.201 0 along with fee	No Consent issued	Demand Draft No. 188492 dated 05.04.2010
5	2011-12	OIL letter ref. no. S&E/E/2 0/464 dated 20.04.201 1 along with fee	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/1335 dated 01/11/2011 (Demand Draft No. 936399 dated 29.10.2011).
6	2012-13		Consent obtained. Ref No. WB/Z-I/T- 879/94- 05/441/005 dated Guwahati the 09.11.2012	
7	2013-14	OIL letter ref. no. S&E/E/2 0/306 dated 11.03.201 3.	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/942 dated 11/07/2013 (Demand Draft No. 943375 dated 27.06.2013). Fee was deposited as per letter ref. no. RO/DBR/T- 2115/02-03/106/325 dated 20.05.2013
8	2014-15	OIL letter ref. no. S&E/E/2 0275 dated 14.03.201 4	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/732 dated 29.05.2014 (Demand Draft No. 409730 dated 17.05.2014). Fee was deposited as per letter ref. no. RO/DBR/T- 2115/02-03/123/24 dated 01.04.2014
9	2015-16	OIL letter ref. no. S&E/E/2 0/411 dated 27.03.201	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/712 dated 16.05.2015 (Demand Draft No. 663015 dated 11.05.2015). Fee was

		5		deposited as per letter ref. no. RO/DBR/T-2115/02-03/Pl-1/02/28 dated 06.04.2015
10	2016-17	OIL letter ref. no. S&E/E/2 0/473 dated 26.02.2016	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/1623 dated 25.08.2016 [Demand Draft No. 604464 dated 17.08.2016]. Fee was deposited as per letter ref. no. RO/DBR/T-2115/02-03/53/507 dated 17.06.2016
11	2017-18	OIL letter ref. no. S&E/E/2 0/422 dated 14.03.2017	No Consent issued	Fee was deposited vide letter ref. no. S&E/E/20/1955 dated 07.12.2017 [Demand Draft No. 824065 dated 02.12.2017]. Fee was deposited as per letter ref. no. RO/DBR/T-2115/02-03/Pl-1/98/1666 dated 23.03.2017
12	2018-19		Consent Obtained, Ref. No. UAIN/PCB/F50/DI/006082/01/2019	
13	2019-20	Online application No. PCB/F50/DI/00831 8/10/2019 dated 05.10.2019	No Consent issued	
14	2020-21			For the year 2010-21, Regional Office Dibrugarh, PCBA Assam vide mail dated 29 th May 2010 advised to deposit the fee along with supporting documents for consideration of CTO upto 31.03.2021.

The above is for your kind information and consideration, please.

Thanking you,

Yours faithfully
For **OIL INDIA LIMITED**

Suranjan Majumder

(Suranjan Majumder)
Chief General Manager (HSE)
For **RESIDENT CHIEF EXECUTIVE**

Pollution Control Board, Assam

(Department of Environment & Forests : Government of Assam)

অসম প্রদূষণ নিয়ন্ত্রণ পৰিষদ

(অসম চৰকাৰৰ বন আৰু পৰিৱেশ বিভাগ)



No. WB/DIB/T-396/08-09/243

Dated Guwahati the, 19th June, 2020

To

The Resident Chief Executive
M/s Oil India Ltd. (OIL)
Duliajan, Pin-786602
Dist.: Dibrugarh (Assam).

Central Pollution Control Board
কেন্দ্ৰীয় পৰিষ্কাৰণ বোর্ড উত্তৰ পূৰ্ব অঞ্চল - ৩৭৩০৭৪
Regional Directorate - North East, Shillong - 793014
পৰ্যায়ন, বন আৰু জলবায়ু পৰিষ্কাৰণ মন্ত্ৰালয়, ভাৰত চৰকাৰ
Ministry of Environment, Forest & Climate Change, Govt. of India

RECEIPT NO 360

DATED 24.06.2020

Sub: CLOSURE NOTICE.

WHEREAS, you are operating your production, drilling, pumping of crude oil as well as laying of pipelines activities through various installations located at different parts in the state of Assam;

WHEREAS, it is mandatory to obtain prior permission / clearance from the MoEF&CC as well as State PCB, for the aforesaid activities as per the EIA Notification, 2006 and various provisions under the Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 as amended upto date;

WHEREAS, it is observed that, you have been operating your Baghjan oil field activities without obtaining prior Consent to Establish / Consent to Operate from Pollution Control Board, Assam which is a serious violation of the provisions of Water Act, 1974, Air Act, 1981 as well as Environment (Protection) Act, 1986;

WHEREAS, you are operating your Baghjan oil field installation without any Effluent Treatment Plant (ETP);

WHEREAS, Baghjan Oil field is located just 500 metres to the Maguri-Motapung wetland which is part of eco-sensitive zone of the Dibru-Saikhowa National Park which is effected severely due to the negligence from your end;

WHEREAS, Oil India Ltd. was required to take adequate measures to prevent spillage of Hazardous wastes into the water bodies through designated drains and treatment facilities and further to prevent measures to mitigate oil spillage and fire hazards. Further para XVIII of the Environmental Clearance directs the company to install blow-out prevention system to avoid accidents during drilling, but you have failed to do that;

WHEREAS, you are destroying the aquatic life of Dibru-Saikhowa National Park and Maguri-Motapung wetland of endangered species in the name of exploring oil without any mitigation measures;

WHEREAS, it is observed that you have been operating your production as well as drilling installations without being equipped with proper safety & precautionary measures for which often major accidents are occurred at the drill sites / production installations;

WHEREAS, the recent incident of gas leakage from the Well No. BGN-5 and subsequent blast of fire at the said well of Baghjan Oil Field in Tinsukia district, shows the negligence and carelessness of the authority of M/s OIL, Duliajan, towards safety of people's life & property in neighbouring area as well as towards protection of Environment;

Contd....p/2

Head Office : Bamunimaidam, Guwahati - 781021, Assam : India.
Phone : 2652774 & 2550258 : Fax : 0361-2550259 ; Gram : POLLUTIONCONTROL
E-mail : membersecretary@pcbassam.org; Website : www.pcbassam.org
Regional Offices at : Dibrugarh, Golaghat, Sibsagar, Tezpur, Guwahati, Bongaigaon, Nagaon & Silchar.

Pollution Control Board, Assam
(Department of Environment & Forests : Government of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ
(অসম চৰকাৰৰ বন আৰু পৰিবেশ বিভাগ)

-2-

WHEREAS, it is seen that you have been not submitting the Annual Report regularly under Section 9 of the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016, which is a serious violation and liable to be punished under the law in force;

WHEREAS, Pollution Control Board, Assam have refused your request for extension of time for reply to the Show Cause notice issued to you on 10.06.2020;

NOW, THEREFORE, under the above facts & circumstances, Pollution Control Board, Assam is constrained to inform you that, you have nonchalantly violated the provisions of law in force causing pollution to the environment and in exercising of powers conferred upon it under Section 5 of the Environment (Protection) Act, 1986; Section 33A of the Water (Prevention & Control of Pollution) Act, 1974 and Section 31A of the Air (Prevention & Control of Pollution) Act, 1981 as amended till date, you are directed to **CLOSE DOWN** all the production as well as drilling operations of your all installations of Baghjan Oil Field forthwith and to take all necessary measures for extinguishing the fire/blow-out of the Well No. BGN-5.

s/r
Member Secretary (i/c)

Dated Guwahati the, 19th June, 2020

Memo No. WB/DIB/T-396/08-09/243-A,

Copy to:

- 131
1. The Staff Officer to the Chief Secretary to the Government of Assam for kind appraisal of the Chief Secretary.
 2. The Principal Secretary to the Govt. of Assam, Environment & Forests Department, Dispur, Guwahati-6 for favour of kind information.
 3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 110032 for favour of kind information.
 4. The Regional Director, Central Pollution Control Board, Ministry of Environment, Forest & Climate Change, Government of India, Regional Directorate, North East, "TUM SIR", Lower Motinagar, Near Fire Brigade H.Q., Shillong - 793014, (Meghalaya) for favour of kind information.
 5. The Deputy Commissioner, Dibrugarh / Tinsukia district for favour of kind information.
 6. The General Manager, DI&CC, Dibrugarh / Tinsukia district for favour of kind information.
 7. The General Manager, APDCL, Tinsukia district for favour of kind information and requested to disconnect power supply to all the production / drilling installations of Baghjan Oil Field of M/s Oil India Limited, Duliajan.
 8. PA to the Chairman, PCBA for kind appraisal of the Hon'ble Chairman.
 9. The Regional Executive Engineer (i/c), Regional Office, Dibrugarh, PCBA for information & necessary action.

Dipankar
Member Secretary (i/c)



E 577888



Sl. No... 9593

Date... 22-6-20

BEFORE THE NOTARY PUBLIC AT DIBRUGARH ::: ASSAM

AFFIDAVIT

Dated: 22.06.2020

I, SHRI SURANJAN MAJUMDER, son of late Sukhamoy Majumder resident of Oil Housing Colony, Oil India Limited, P.O. & P.S. Duliajan, District-Dibrugarh Assam, do hereby solemnly affirm and declare on behalf of Oil India Limited on oath as follows:-

- (1) That I am an employee of Oil India Limited, Duliajan and presently holding the post of Chief General Manager- Health Safety & Environment under Oil India Limited.
- (2) That I am fully competent and authorised to swear this Affidavit on behalf of Oil India Limited.
- (3) That Oil India Limited is fully committed to the compliance of various Acts, Rules & Regulations applicable to its E&P activities.
- (4) That the application along with necessary fees for Consent to Establish/ Consent to operate/ renewal for drilling locations along with production installations was submitted vide letter no S&E/E/20/723 dated 05.07.2006.

Suranjan Majumder

Rafique Ahmed
 Rafique Ahmed, LL.B
 NOTARY DIBRUGARH
 Regd. No DBR-8

contd. to the page no 2

Scanned with CamScanner

Pollution Control Board, Assam

(Department of Environment & Forests : : Government of Assam)

অসম প্রদূষণ নিয়ন্ত্রণ পৰিষদ

(অসম চৰকাৰৰ বন আৰু পৰিবেশ বিভাগ)



No. WB/DIB/T-396/08-09/288

Dated Guwahati the, 22nd June, 2020

To

The Resident Chief Executive
M/s Oil India Ltd. (OIL)
Duliajan, Pin-786602
Dist.: Dibrugarh (Assam).

Central Pollution Control Board
গোপীৰ নিৰ্দেশালয় উত্তৰ পূৰ্ব শিলাংগ - ৭৭৩০৭৪
Regional Directorate - North East, Shillong - 783014
পৰিবেশ, বন আৰু জলবায়ু পৰিষ্কাৰণ মন্ত্ৰালয়, দিল্লী
Ministry of Environment, Forest & Climate Change, Govt. of India

RECEIPT NO 351

Sub: Withdrawal of "CLOSURE NOTICE".

DATED 22.06.2020

Ref: i) This office Closure Notice vide No. WB/DIB/T-396/08-09/243 dtd. 19.06.2020 issued to M/s Oil India Ltd. (OIL), Duliajan,

ii) Your letter vide No. S&E/E/121/814 dtd. 22.06.2020 alongwith Affidavits.

Sir,

With reference to the subject as cited above, the "Closure Notice" served to M/s Oil India Ltd. vide the above referred letter is withdrawn in pursuance of the affidavit submitted by M/s Oil India Ltd. under the following conditions:

- M/s Oil India Ltd. shall have to submit a detailed time bound Environmental Management Plan within 15 (fifteen) days from the date of issue of this letter for environmental mitigation and extinguishing of fire at the Baghjan Oil Field and act accordingly.
- They have to apply for Consent to Operate (CTO) under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 and Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 separately for each and every drilling, production and other installations along with environmental management plan and requisite documents within 1 (one) month.
- They have to submit all the details of Hazardous Waste generated, disposed & treatment facilities as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

Contd...p/2



Pollution Control Board, Assam

(Department of Environment & Forests : : Government of Assam)

অসম প্ৰদূষণ নিয়ন্ত্ৰণ পৰিষদ

(অসম চৰকাৰৰ বন আৰু পৰিৱেশ বিভাগ)

-2-

- d) They have to apply for Authorization under E-Waste (Management) Rules, 2016 and take necessary action for proper disposal of E-waste
- e) They have to submit the return as per Batteries (Management & Handling) Rules, 2001 framed under the Environment (Protection) Act, 1986 within 31st July, 2020.

Member Secretary (i/c)

Memo No. WB/DIB/T-396/08-09/288-A,

Dated Guwahati the, 22nd June, 2020

Copy to:

147

1. The Staff Officer to the Chief Secretary to the Government of Assam for kind appraisal of the Chief Secretary.
2. The Principal Secretary to the Govt. of Assam, Environment & Forests Department, Dispur, Guwahati-6 for favour of kind information.
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110032 for favour of kind information.
4. The Regional Director, Central Pollution Control Board, Ministry of Environment, Forest & Climate Change, Government of India, Regional Directorate, North East, "TUM SIR", Lower Motinagar, Near Fire Brigade H.Q., Shillong – 793014, (Meghalaya) for favour of kind information.
5. The Deputy Commissioner, Dibrugarh / Tinsukia district for favour of kind information.
6. The General Manager, DI&CC, Dibrugarh / Tinsukia district for favour of kind information.
7. The General Manager, APDCL, Tinsukia district for favour of kind information and requested to re-connect power supply to all the production / drilling installations of Baghjan Oil Field of M/s Oil India Limited, Duliajan.
8. PA to the Chairman, PCBA for kind appraisal of the Hon'ble Chairman.
9. The Regional Executive Engineer (i/c), Regional Office, Dibrugarh, PCBA for information & necessary action.

Member Secretary (i/c)

Annexure - A
APPENDIX C

Oil India Limited
A COMPANY INCORPORATED IN INDIA UNDER THE COMPANIES ACT, 1956
REGISTERED OFFICE: 10, RAJENDRA NAGAR

SHELLY & ENVIRONMENT
CONSULTANTS & ENGINEERS
10, RAJENDRA NAGAR
DIBRUGARH, ASSAM

Ref. No. S&E/18/20/723 of 05.07.2007

Regional Executive Engineer,
Pollution Control Board, Assam,
Back Side of ASTC Bus Station,
Chauki, Linghee, Dibrugarh.



Sanjib Kumar
In P. Bora
12/7

Sub: Consent to establish and Consent to operate as per Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 for the year 2006-2007

Dear Sir,

We are sending herewith the applications for consent to establish and consent to operate in the prescribed format duly filled in. The necessary application fee will be paid shortly through demand draft.

Please note that the consent fee will be paid against each drilling location projected to be drilled in financial year 2006-2007. The consent to establish & consent to operate for all the drilling locations is applied vide a composite consent application as done earlier. Moreover, in case of the wells as projected and for which consent has already been obtained, but the same could not be drilled in that particular year, the consent to operate these wells will remain valid till those wells are drilled.

Thanking you,

Yours faithfully,
OIL INDIA LIMITED

(S. Bora)
Head - S&E
For Group General Manager

Applications Submitted:

- ✓ 1. Drilling operations - Mulingin
- ✓ 2. Production operations - Moran field.
- ✓ 3. Production operations - Naharkatiya field
- ✓ 4. Production operations - Digboi field.
- ✓ 5. Production operations - Kathaloni field
- ✓ 6. Production operations - Dikom field.
- ✓ 7. Production operations - other isolated and satellite fields
- ✓ 8. Central Industrial Complex - Duliajan
- ✓ 9. Central Industrial Complex - Moran.

Encl : 1) Application forms (in triplicate)

BNS/trg.

OIL India Limited
A GOVERNMENT OF INDIA ENTERPRISE
REGISTERED OFFICE: DISPUR, ASSAM

SAFETY & ENVIRONMENT
POLYMERIZATION UNIT
S/O: J. K. SINGH
P.O.: DISPUR
P.O. BOX: 100
DISPUR, ASSAM

Ref. No. S&E/E/20/722 of 12.09.2006

Regional Executive Engineer,
Pollution Control Board, Assam,
Behind ASTC, Chowkidighhee,
Dibrugarh, Assam

S/O: J. K. SINGH
P.O.: DISPUR
P.O. BOX: 100
DISPUR, ASSAM

Sub : Payment of consent fee for the year 2006-07

Ref : Our letter No. S&E/E/20/723 of 05.07.2006

Dear Sir,

In reference our above mentioned letter, we are enclosing herewith a Demand Draft No. 085532 for an amount of Rs. 22,30,000/- (Rupees twenty two lakhs thirty thousand only) towards the fee for consent to establish and consent to operate the OIL installations for the year 2006-07. The details of the field/installations and the corresponding fees paid has been shown in the Annexure attached herewith. The fees have been paid in the increased rate as advised by you vide your Notification No. ENG.26/2003/14 dtd. Dispur the 12th Nov. 2003.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully,
OIL INDIA LIMITED



(J. K. SINGH)
Head - S&E
For Group General Manager

Encl : 1) DD No. 085532 dtd. 09.08.2006
2) Annexure - I

By  BNS/trg.

NOC/Consent fee to be paid by OIL FIELD DEVELOPMENT COMPANY
(As per revised rates)

Sl. No.	Activity/Installation	Fee to be paid for Consent to establish	Fee to be paid for Completion certificate	Rate
1.	Production Installations			
	(a) Naharkatya Field			
	(b) Digboi Field		25,000 X 6	1,50,000/-
	(c) Moran Field			
	(d) Kathaloni Field			
	(e) Dikom Field			
	(f) Other satellite field			
2.	Drilling Operation (33 Locations)	50,000 X 33 16,50,000/-	10,000 X 33 3,30,000/-	19,80,000/-
3.	Central Industrial Complex, Duliajan		50,000/-	50,000/-
4.	Central Industrial Complex, Moran		50,000/-	50,000/-
				TOTAL RS 22,30,000/-

(Rupees twenty two lakh thirty thousand only).

The Member Secretary,
Pollution Control Board, Assam,
Samungreidam, Ghy-21.

Subj:- Consent to establish & Consent to operate for the year 2006-07 of M/S Oil India Ltd., Duliajan under the Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981.

Sir,

With reference to above, I am sending herewith the application for consent to establish & consent to operate for the year 2006-07 of M/S Oil India Ltd., Duliajan alongwith D.O.No. 005532 dtd. 09-09-2006 amounting to Rs. 22,30,000/- (Rs. twenty-two lacs thirty thousand) only for favour of your consideration.

The details of the field/installation and the corresponding fees are mentioned below.

Sl. No.	Area/Installations	Fees to be paid in Rs		Total Rs.
		Consent to establish	Consent to operate	
1.	Production Installations A. Nzharkatia Field B. Digbsai Field C. Maran Field D. Kathalsni Field E. Dikom Field F. Other Satellite Field	-	Rs. 25,000 X 6	Rs. 1,50,000.00
2.	Drilling Operation (33 locations)	50,000 X 33 = 16,50,000/-	40,000 X 33 = 13,30,000/-	Rs. 19,80,000.00
3.	Central Industrial Complex, Duliajan	-	50,000/-	Rs. 50,000.00
4.	Central Industrial Complex, Maran	-	50,000/-	Rs. 50,000.00
Total				Rs. 22,30,000.00

33 drilling locations are being proposed to drill within 2006-07 which may not be completed within the period and will be carried over the next year for the drill site those which could not be done.

Necessary inspection report will be submitted later on when required.

This is for favour of your information.

Yours faithfully,

(H. R. PHUKAN)
REGIONAL EXECUTIVE ENGINEER
DIBRUGARH

o/e
ENCLOSURE AS STATED.

Scanned with CamScanner

DRAINAGE OPERATIONS

SCHEDULE - 1

Common Application for Consent under
Water (Prevention and Control of Pollution) Act, 1974,
Air (Prevention and Control of Pollution) Act, 1981 and Authorisation under
Hazardous Wastes (Management and Handling) Rules, 1989, as amended

No.
Accompanying form in triplicate to be submitted
by the applicant. One copy may be retained by
the applicant

**Explanatory note for filling in application form for
Consent / Authorisation**

- (1) Any applicant knowingly giving incorrect information or suppressing any information pertaining to any of the items of the application shall be liable for punishment as per provisions under the relevant Act.
- (2) The application form shall be submitted at the head-quarter office of the Board at the address given on the first page of the application form or to the respective Zonal or Regional or Sub-Regional office or District Office of the Board / Pollution Control Committee under whose jurisdiction the applicants activity falls.
- (3) The application shall be accompanied by the consent fee in the form of Demand Draft in favour of State Pollution Control Board / Pollution Control Committee. Fee paid is not refundable.
- (4) For the items marked * strike out which is not relevant.
- If any of the items is not relevant to the activity of the applicant, please state 'Not Applicable'.
- (6) If the space for reply provided for any item is inadequate, use additional sheets, duly referenced
- (7) Item 1 : Give the name of the person who is authorised by the applicant to transact their business
- (8) Item 2 : Also state the concerned institutions under whose administrative area the unit falls.
- (9) The form shall be accompanied by the relevant documents specified on the last page of the application form.
- (10) Capital Investment - Consent fee is to be paid based on gross fixed capital investment of the unit without depreciation till the date of application. The consent fee is to be paid in the form of Demand Draft in favour of State Pollution Control Board / Pollution Control Committee.

Application Form for Consent / Authorisation

From: GROUP GENERAL MANAGER
OIL INDIA LIMITED
DULLAJAN, DIBRUGAHH
ASSAM

To
The Member Secretary
Pollution Control Board, Assam
Bamunimaidon, Guwahati - 24

Sir,

I / We hereby apply for *

- (i) Consent to Establish / Operate / Renewal of consent under section 25 and 26 of the Water (Prevention and Control of Pollution) Act, 1974, as amended.
- (ii) Consent to establish / operate / renewal of consent under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended.
- (iii) Authorisation / renewal of authorisation under rule 5 of the Hazardous Wastes (Management and Handling) Rules, 1989, as amended in connection with my / our existing / proposed / altered / additional manufacturing / processing activity from the premises as per the details given below.

Part A : General

- | | |
|--|--|
| 1. Name, designation, office address with telephone, fax numbers, e-mail of the applicant / occupier / Industry / Institution/ Local Body. | SRI S. BORA .
HEAD - S.E.
Safety & Environment Dept.
OI India Limited, Duliajan.
Tel : 0374 - 2800542 . |
| 2. (a) Name and location of the industrial unit / premises for which the application is made. (Give revenue Survey Number / plot number, name of Taluka and District, also telephone and fax number) | → <u>Drilling Locations:</u>
DFR, NKO, DFU-1, MEV, HST
HRI, DFZ, DGA, HSM, HSI, H
NKM, HSC, HRR-H, HSS, HS
HSH, HRZ, HSB, HSL, HSD,
HRP, DGD/DGC, IQ, TP-
IN, MEW, DIBA, DIAZ, H
DFW. |
| (b) Details of the planning permission obtained from the local body / Town and Country Planning authority / metropolitan development authority / designated authority. | NA. |
| (c) Name of the local body under whose jurisdiction the unit is | |

APPENDIX D

ITEM NO.6

COURT NO.4

SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
R E C O R D O F P R O C E E D I N G SINTERLOCUTORY APPLICATION NO. 3934 IN Writ Petition(s) (Civil)
No(s). 202/1995

IN RE : T.N. GODAVARMAN THIRUMULPAD Petitioner(s)

VERSUS

UNION OF INDIA & ORS. Respondent(s)

(FOR MODIFICATION OF COURT'S ORDER DATED 05.10.2015)

Date : 07-09-2017 This application was called on for hearing
today.CORAM : HON'BLE MR. JUSTICE MADAN B. LOKUR
HON'BLE MR. JUSTICE DEEPAK GUPTAFor Petitioner(s) Mr. Harish N. Salve, Sr. Adv. [A.C.] [NP]
Mr. A.D.N. Rao, Advocate [A.C.]
Mr. Siddhartha Chowdhury, Advocate [A.C.] [NP]
Ms. Aparajita Singh, Advocate [A.C.] [NP]For Respondent(s) Mr. Ranjit Kumar, SG
Mr. S. Wasim A. Qadri, Adv.
Mr. Saeed Qadri, Adv.
Mr. Ayush Aggarwal, Adv.
Mr. Navnit Kumar, Adv.Ms. Pinky Anand, ASG
Ms. Gargi Khanna, Adv.
Mr. Ravindara Bana, Adv.
Ms. Snidha Mishra, Adv.
Mr. Raj Bahadur, Adv.
Mr. G.S. Makker, Adv.

Mr. Haris Beeran, Adv.

M/S Corporate Law Group

Mr. Shuvodeep Roy, Adv.
Mr. Sayooj Mohandas, Adv.
Mr. Rohit K. Mahonta, Adv.

UPON hearing the counsel the Court made the following

O R D E R

We have been taken through the Minutes of 44th Meeting of the Standing Committee of National Board for Wildlife held on 29.07.2017 and letter dated 09.08.2017 of the Government of India, Ministry of Environment, Forest and Climate Change (Wildlife Division) regarding the proposal given by the Oil India Limited to extract hydrocarbon beneath 3900-4000 meters of Dibru Saikhowa National Park. The proposal has been accepted subject to certain conditions which are indicated in Agenda Item 42.3.2 of the said Minutes.

In view of the above, the application is allowed. However, we make it clear that the Oil India Limited will also be bound by the undertaking dated 25.07.2017 as mentioned in the letter of Dr. R. Dasgupta, Executive Director (Corporate Affairs) for Chairman and Managing Director:

- i) OIL will carry out Bio-diversity Impact Assessment study through Assam State Biodiversity Board, for which budgetary offer have already been obtained on 12th May, 2017.
- ii) OIL will carry out subsidence study followed with taking mitigation measures, in order to ensure that there is no impact in the forest surface above the reservoir at height 3,900 to 4,000 mtr, due to extraction of hydrocarbon from the reservoirs.
- iii) All mitigation measures will be in place in case of any eventuality causing Oil Spillage inside the Park area such as - Install Blow Out Preventer at well head and provide necessary valves in the Production installations located outside the Park area. Standard Operating Procedure (SOP), approved by the competent authority, pertaining to Oil Spillage, will be strictly adhered to.
- iv) Undertake schedule test and inspection of the area periodically in order to asses any abnormality in the surface area above the reservoir inside the Park.

v) OIL will also ensure strict compliance of the conditions stipulated in EIA Notification, 2006 for both inside the Park areas as well as ESZ area of it.

(MEENAKSHI KOHLI)
COURT MASTER (SH)

(SUMAN JAIN)
COURT MASTER

APPENDIX E

ANNEXURE-I

CIRCLE : DOOMDOOMA MAUZA HAPJAN GAON: BAGHJAN

Sl. No	NAME	FATHER/HUSBAND NAME	PATTA TYPE	PATTA NO.	DAG NO.	AREA OF LAND	CLASS OF LAND
1	SRI KALIA GOGOI	LT GULUK CH GOGOI	PERIODIC	73	341	12B-4K-7L	BARI
2	MANGLI URANG	REOTA URANG	PERIODIC	59	343	3B-3K-9L	SHALITOLI
3	BIMAL CH DAS	KARTIK CH DAS	PERIODIC	35	344	8B-1K-13K	LAHITOLI
4	SRI SOHRAI KANDA	LT GAHR MAHAN KANDA	PERIODIC	13	345	1B-3K-5L	SHALITOLI
5	SRI SOHRAI KANDA	LT GAHR MAHAN KANDA	PERIODIC	13	346	6B-3K-14L	SHALITOLI
6	SRI HIRA DUWARAH	KINARAM DUWARAH	PERIODIC	27	347	10B1K-18L	BARI
7	SRI HIRA DUWARAH	KINARAM DUWARAH	PERIODIC	27	348	4B-1K-12L	SAHTOLI
8	SRI HIRA DUWARAH	KINARAM DUWARAH	PERIODIC	130	349	5B-3K-13L	FORING
9	SRI SOHRAI KANDA	LT GAHR MAHAN MANDA	ANNUAL	33	353	3B-1K-1L	FORING
10	SRI LAKHIA KOIRI SRI SUNULAL KOIRI SRI KANMUKAR KOIRI	SAINA KOIRI	PERIODIC	14	356	6B-45-14L	FORING
11	SRI ATUWA URANG	LIKHOR URANG	ANNUAL	8	357	7B-14L	FORING
12	SRI HIRA DUWARAH	KINARAM DUWARAH	PERIODIC	27	359	4B-4K-5L	SAHTOLI
13	SRI MAGESWAR MORAN	LEHENG MORAN	PERIODIC	39	360	2B-2K-10L	SHALITOLI
14	SRI LAKHIA KOIRI SRI SUNULAL KOIRI SRI KANMUKAR KOIRI	SAINA	PERIODIC	14	361	4K-19L	FORING
15	SRI SENIRAM GOGOI	DHARMA GOGOI	PERIODIC	19	363	5B-3K-14L	FORING
16	SRI LAKHIA KOIRI SRI SUNULAL KOIRI SRI KANMUKAR KOIRI	SAINA Koiri	PERIODIC	37	364	3K-3L	B. FORING
17	SMTI MANGLI URANG KOUAPANI SASTRI L.P. SCHOOL	SRI REDANG URANG	PERIODIC	59	365	2B-2K-4L	FORING
18	SRI CHENIRAM GOGOI	DHARMA GOGOI	PERIODIC	19	366	3K-15L	FORING
19	SRI LAKHIA KOIRI SRI SUNULAL KOIRI SRI KANMUKAR KOIRI		ANNUAL	34	373	1B-4K13L	FORING
20	SRI MASULA URANG	JOSKORI URANG	ANNUAL	159	374	1K-1L	FORING
21	SRI SAINA KOIRI	LATE BISSA KOIRI	ANNUAL	34	377	3K-5L	FORING
22	SRI RAM NAGBANSHI	LATE BIRJU NAGBANSHI	ANNUAL	161	384	2B-4K-3L	FORING
23	SRI SATNARAYAN SAHANI SRI BHAGWAN SAHANI SRI HIJ SAHANI SRI SARDA SAHANI SRI RAMAYAN SAHANI	LATE BABULAL SAHANI	PERIODIC	82	385	1B-2K-10L	FORING
24	SRI SATNARAYAN SAHANI SRI BHAGWAN SAHANI SRI HIJ SAHANI SRI SARDA SAHANI SRI RAMAYAN SAHANI		PERIODIC	38	386	2B-4K15L	BHAL BARI
25	SRI LALIT URANG SRI LAKHI URANG SRI BHUTKA URANG	SRI KRISHNA URANG SUKLAL URANG	ANNUAL	176	388	2B-3L	FORING
26	SRI FIROJ SINGH NAGBANSHI SRI DEBARU URANG SRI BHATKUL URANG	SRI SINGNU URANG	ANNUAL	32	390	2B-4K-7L	LAHITOLI
27	SRI JOHON URANG	LATE SUKRA URANG	ANNUAL	71	392	1B-3K-12L	FORING
28	SRI BANDHAN URANG	BADELA URANG	ANNUAL	106	394	2K10L	FORING
29	SRI JAMADHAN URANG	LATE LEHENG URANG	PERIODIC	63	395	2B-2L	SHALITOLI
30	SRI BANDHAN	SRI BADELA NAGBANSHI	ANNUAL	106	396	3K-3L	FORING
31	SRI BANDHAN	SRI BADELA NAGBANSHI	ANNUAL	106	397	3K-13L	FORING

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32	SRI PUNA HAZARIKA	SRI NIL HAZARIKA	PERIODIC	128	408	3B-16L	FORING
33	SRI LETHUK MORAN	SRI PANDU URANG	ANNUAL	177	407	2B-1K-11L	FORING
34	SRI DEBENDRA MORAN	SRI BHAGESWAR URANG	PERIODIC	160	406	2B-3K-5L	BARI
35	SRI THANURAM BORA	SRI BADUBAR URANG	PERIODIC	109	405	3B-3K-17L	FORING
36	SRI MADHA URANG	LATE LADI URANG	ANNUAL	160	404	4B-2K-7L	FORING
37	SRI BHAI RA NAGBANSHI	SRI ETUA NAGBANSHI	ANNUAL	129	403	6B-15L	FORING
38	SRI ETUA NAGBANSHI	SRI LAU NAGBANSHI	ANNUAL	9	416	3B-4K-7L	FORING
39	SRI DUHAN NAGBANSI	SRI SUKRA NAGBANSHI	ANNUAL	71	415	10B-4K-2L	FORING
40	SRI THULA NAGBANSHI	SRI MOHOT NAGBANSHI	ANNUAL	64	412	5B-1K-19	FORING
41	SRI BHABESH MORAN	SRI MAGESWAR MORAN	PERIODIC	174	411	3B-2L	FORING
42	SRI MAGESWAR MORAN	SRI LEHENG MORAN	PERIODIC	172	410	8B	SAHTOLI
43	SRI RAM NAGBANSHI NAGBANSHI	LATE BIRJU NAGBANSHI	ANNUAL	161	421	3B-1K-16L	FORING
44	SRI RAM NAGBANSHI NAGBANSHI	LATE BIRJU NAGBANSHI	PERIODIC	57	420	1B-1K-16L	FORING
45	SRI DINESWAR CHUTIA	SRI LUHUK CHUTIA	PERIODIC	204	449	2B-3L	FORING
46	SRI MONESWAR MORAN	SRI BEDEL MORAN	ANNUAL	142	448	2B-12L	FORING
47	SRI MONESWAR MORAN	SRI BEDEL MORAN	ANNUAL	142	450	1K-6L	BARI
48	SRI MONESWAR MORAN	SRI BEDEL MORAN	ANNUAL	142	451	1B-2K-10L	FORING
49	SRI LAMBESWAR SAIKIA	SRI DEHESWAR SAIKIA	PERIODIC	114	452	1B-1K-2L	BARI
50	SRI LAMBESWAR SAIKIA	SRI DEHESWAR SAIKIA	PERIODIC	114	453	2B-4K-15L	BARI
51	SRI PHUKAN MORAN	SRI MONPUR MORAN	PERIODIC	131	454	4B	B. FORING
52	SRI RITU MORAN	SRI LABESWAR MORAN	PERIODIC	119	455	1B-10L	SAHTOLI
53	SRI NALIKA MORAN	SRI SUGIT MORAN	ANNUAL	76	447	1B-7L	FORING
54	SRI KUL BORA	SRI BUDHBAR BORA	PERIODIC	132	456	1B-2K-2L	FORING
55	SRI KUL BORA SRI PRABIN BORA	SRI BUDHBAR BORA SRI KUL BORA	PERIODIC	132	457	2B-3K-2L	FORING
56	SRI MANGLA MORAN	SRI LUTUMOI MORAN	PERIODIC	198	458	1B-3K-18L	BARI
	SRI THULA MORAN						
	SRI BHAGESWAR MORA						
	SRI MONESWAR MORAN						
57	SRI UMAKANTA MORAN BARUAH	LATE BHAKAL MORAN	PERIODIC	108	444	1B-10L	B. FORING
58	SRI BHAGESWAR MORAN OIL INDIA LTD. DULAJAN	SRI LUXUMONI MORAN	PERIODIC	144	443	1B-4K-16L	B. FORING
59	SRI BIMAL CHANDRA DAS	SRI KARTIK CHANDRA DAS	PERIODIC	36	331	5B-3K-16L	LAHTOLI
60	SMTI MANGLI URANG	SRI REDANG URANG	PERIODIC	59	367	1B-3K-17	FORING
61	SRI LAKHIA KOIRI SRI SUNULAL KOIRI SRI KANMUKAR KOIRI	SRI SAINA KOIRI	PERIODIC	15	330	2B-2K-11L	LAHTOLI
62	SRI BIMAL CHANDRA DAS SECRETARY, SASTRI L.P. SCHOOL	SRI KARTIK CHANDRA DAS	PERIODIC	36	337	5B-4K-14L	B. FORING
63	SRI BIMAL CHANDRA DAS	SRI KARTIK CHANDRA DAS	PERIODIC	36	336	4B-4K-4L	LAHTOLI
64	SRI HARBESWAR DAS	SRI KANDURA DAS	PERIODIC	19	340	2B-4K-16L	BARI
65	SRI HARBESWAR DAS	SRI KANDURA DAS	PERIODIC	19	339	5B-4K-5L	B. FORING
66	SRI BHALAK MORAN	SRI BIHBOR MORAN	PERIODIC	108	1248	1K-15L	BARI
67	SRI THANURAM BORA	SRI BOOBOR BORA	PERIODIC	109	1232	3B-10L	BARI

W. S. S.
17/12/20

K. S. S.
17/12/20

N. S. S.
17/12/20
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68	SRI LAKHESWAR SAIKIA	SRI DEHESWAR SAIKIA	PERIODIC	114	1253	3B-1K-8L	B. FORING
69	SRI LAMBESWAR SAIKIA	SRI DEHESWAR SAIKIA	PERIODIC	114	1256	4B	B. FORING
70	SRI PULIN CHETIA	SRI MEMU CHETIA	PERIODIC	125	1231	1B-13L	FORING
71	SRI PULIN CHETIA	SRI MEMU CHETIA	PERIODIC	125	1259	2B-3K-7L	FORING
72	SRI BHABESH MORAN	SRI MAGESWAR MORAN	PERIODIC	174	1289	1K-14L	FORING
73	SRI PRAMESWAR MORAN	SR: LEHENG MORAN	PERIODIC	206	1325	2B-3L	SHAUTOLI

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ANNEXURE - II								
CIRCLE: DOOMDOOMA		MAUZA: HAPZAN			GAON: BAGHJAN			
SL. NO.	NAME OF PATTADAR	FATHERS/HUSBANDS NAME	TYPE OF PATT	PATTA NO.	DAG NO.	AREA (B-K-L)	CLASS OF LAND	REMARKS
1	2	3	4	5	6	7	8	9
1	MAHAT NAGBANGSHI	KUH NAGBANSHI	ANNUAL	140	418	8B-1K-10L	FORING	
2	MAHAT NAGBANGSHI	KUH NAGBANSHI	ANNUAL	140	417	1B-1K-13L	FORING	
3	SRI ETUWA NAGBANGSHI	MOTI NAGBANGSHI	ANNUAL	7	419	1B-1K-18L	FORING	
4	SRI ETUWA URANG	LUTHUR URANG	ANNUAL	8	370	1B-3K-4L	BARI	
5	1. SRI FAPOR MORAN 2. VABI MORAN	HATKULA MORAN	ANNUAL	96	382	1B-3K-7L	FORING	
6	1. SRI DASARATH GHATOWAR 2. SRI RAMBARAN GHATOWAR	RENGTAI GHATOWAR	PERIODIC	27	313	2B-4K-15L	SHALITALI	
7	1. SRI LOLI CHANDRA BARUAH 2. SRI GOJEN BARUAH	LATE ANDESWAR BARUAH	PERIODIC	2	314	10B-4K-1L	BARI	
8	1. SRI NILDHAR BARUAH 2. SRI GUNDHAR BARUAH	LATE HUMAKANTA PRIYORAM BARUAH	PERIODIC	19	315	8B-0K-4L	B. FORING	
9	1. SRI LALIT CHANDRA BARUAH 2. SRI GOJEN BARUAH	ANDESWAR BARUAH	PERIODIC	2	317	1B-2K-11L	FORING	
10	1. SRI LAKHIA KOIRI 2. SRI CHUMULAL KOIRI 3. SRI KANMUKAR KOIRI	SAINA KOIRI	PERIODIC	14	318	1B-3K-12L	FORING	
11	1. SRI LAKHIA KOIRI 2. SRI CHUMULAL KOIRI 3. SRI KANMUKAR KOIRI	SAINA KOIRI	PERIODIC	14	319	6B-0K-9L	LAHITALI	
12	SMTI. BHUGESWARI GOGOI	SRI KOLIA GOGOI	PERIODIC	27	311	2B-0K-3L	FORING	
13	1. SRI DASARATH GHATOWAR 2. SRI RAMBARAN GHATOWAR	RENGTAI GHATOWAR	PERIODIC	27	312	9B-1K-15L	B. FORING	
14	SRI BIMAL CHANDRA DAS	KARTIK CHANDRA DAS	PERIODIC	36	322	4B-0K-4L	FORING	
15	SRI BHIMAKANTA GOGOI	ADHAN GOGOI	ANNUAL	195	328	16B-0K-12L	LAHITALI	
16	1. SRI FAPOR MORAN 2. VABI MORAN	HATKULA MORAN	ANNUAL	96	424	24B-3K-17L	FORING	
17	SRI ETUWA NAGBANGSHI	LAGU NAGBANGSHI	ANNUAL	9	427	1B-0K-15L	FORING	
18	SRI BAPI CHUTIA	SIMONA CUTIA	PERIODIC	208	429	1B-0K-0L	BARI	
19	SRI BAPI CHUTIA	SIMONA CUTIA	PERIODIC	208	431	3B-0K-10L	FORING	
20	1. SRI LAKHIA KOIRI 2. SRI CHUMULAL KOIRI 3. SRI KANMUKAR KOIRI	SAINA KOIRI	PERIODIC	15	332	3B-0K-3L	LAHITALI	
21	SRI ETUWA NAGBANGSHI	LAGU NAGBANGSHI	ANNUAL	9	425	2B-4K-0L	FORING	
22	1. SRI BAPI CHUTIA 2. OIL INDIA LTD.	SIMONA CUTIA DULAJAN	PERIODIC	208	430	1B-2K-5L	FORING	
23	SRI DHANESH MORAN	SUNGBAR MORAN	PERIODIC	104	428	6B-2K-19L	FORING	
24	SRI MAGESWAR MORAN	LEHENG MORAN	PERIODIC	81	439	2B-2K-9L	BARI	
25	1. SRI THULA MORAN 2. SRI BHADRESWAR MORAN	LOTUMOI MORAN	PERIODIC	199	438	4B-2K-9L	FORING	
26	1. SRI MILAI CHETIA 2. OIL INDIA LTD.	LATE TIP CHETIA DULAJAN	PERIODIC PERIODIC	207	434	3B-1K-10	BARI	
27	SRI DHULA MORAN	LUKUMPAR MORAN	PERIODIC	145	437	2B-2K-6L	FORING	
28	SRI DIMBESWAR MORAN	MOXHBAR MORAN	ANNUAL	133	505	10B-0K-9L	FORING	

M/M (S) 07/07/2020

W. S. 1/7/20
NBO's
04/07/2020
Circle Officer
DOOMDOOMA
DOOMDOOMA

29	1. SRI DIMBESWAR MORAN 2. SRI BUBUL MORAN 3. SRI MOG MORAN 4. SRI LEU MORAN 5. SRI PADESWAR MORAN 6. SRI ADESWAR MORAN	MOKHBAR MORAN	PERIODIC	46	504	11B-1K-17L	FORING
30	SRI MAGNA BHUYAN	CHUTIA BHUYAN	ANNUAL	192	514	3B-4K-10L	FORING
31	SRI DIMBESWAR MORAN	MOKHBAR MORAN		193	501	2B-0K-4L	FORING
32	1. SRI BOOL MORAN 2. SRI PHANIDHAR MORAN 3. SRI MILESWAR MORAN	DAUK MORAN	ANNUAL	70	500	2B-4K-6L	FORING
33	SRI LAKHESWAR MORAN	RUPABAR MORAN	ANNUAL	178	494	3B-1K-19L	FORING
34	SRI GODESWAR MORAN	BHEKE HAZARIKA	PERIODIC	156	492	7B-3K-7L	B. FORING
35	SRI BATEK MORAN	SRI NOBOR MORAN	PERIODIC	121	522	6B-3K-5L	FORING
36	1. SRI THULA MORAN 2. SRI BHADRESWAR MORAN 3. SRI MANGLA MORAN	LUTUME MORAN	PERIODIC	199	461	2B-3K-13L	FORING
37	SRI MANGAL KISHAN	AGAL KISHAN	ANNUAL	157	463	1B-4K-9L	FORING
38	1. SRI MANGLA MORAN 2. SRI THULA MORAN 3. SRI BHADRESWAR MORAN	LUTUMOI MORAN	PERIODIC	198	460	4B-3K-4L	B. FORING
	4. SRI MANESWAR MORAN	LATE BEDEL MORAN					
39	1. SRI MANGLA MORAN 2. SRI THULA MORAN 3. SRI BHADRESWAR MORAN	LUTUMOI MORAN	ANNUAL	116	465	1B-3K-12L	FORING
	4. SRI MANESWAR MORAN	LATE BEDEL MORAN					
40	1. SRI MEHENG MORAN 2. SRI MAWAT MORAN 3. SRI BUIN MORAN	LATE BHOLOW MORAN	ANNUAL	128	464	3B-0K-19L	FORING
	4. SRI DHANESWAR MORAN 5. SRI PANIRAM MORAN 6. SRI MOLOKA MORAN 7. SRI LOPHOW MORAN	LATE PENOW MORAN					
	8. SRI HINGORA MORAN	LATE BHOLOW MORAN					
41	SRI LUTHUP MORAN	PANDU MORAN	ANNUAL	177	468	1B-2K-13L	FORING
42	SRI LOPOK MORAN	TULAN MORAN	PERIODIC	126	488	5B-1K-0L	BARI
43	SRI NAREN MORAN	TULAN MORAN	PERIODIC	127	490	1B-1K-7L	FORING
44	1. SRI TOKOW MORAN 2. SRI LABHOT MORAN	LATE HEMANTA MORAN	PERIODIC	22	529	2B-1K-6L	B. FORING
	3. SRI UBHAT MORAN 4. SRI MILESWAR MORAN 5. SRI BIRESWAR MORAN 6. SRI PUBHESWAR MORAN	LATE GAHIN MORAN					
	7. SRI NANDE MORAN	JOY MORAN					
45	SRI BHUME MORAN	BAUL MORAN	PERIODIC	139	484	8B-0K-0L	FORING
46	SRI THULUK MORAN	SRI HARUBAR MORAN	PERIODIC	25	485	1B-3K-10L	B. FORING
47	SRI ANIYAI MORAN	HALI MORAN	ANNUAL	5	483	1B-0K-17L	B. FORING
48	1. SRI DHANESWAR MORAN 2. SRI JUNA MORAN	LATE BIHUWA	PERIODIC	30	470	1B-4K-3L	B. FORING
	3. UMAKANTA MORAN BARUAH	BHOLOK MORAN					

*Man (Su)
4/7/2020*

*Wales
4/7/20 NDD
19/07/2020
Doom Dajoma
Doom Dajoma*

49	SRI JUNABAR MORAN	BIHURAM MORAN	PERIODIC	175	471	1B-1K-2L	FORING	
50	SRI JUNABAR MORAN	BIHURAM MORAN	PERIODIC	175	472	1B-OK-16L	FORING	
51	SRI PILIYA MORAN	LATE LUFUK MORAN	PERIODIC	64	473	5B-3K-13L	BARI	
52	SRI PILIYA MORAN	LATE LUFUK MORAN	PERIODIC	64	474	2B-OK-18L	SMALITALI	
53	SRI JONADHAN MORAN	LEHENG MORAN	PERIODIC	205	475	1B-1K-15L	B. FORING	
54	1. SRI PENOW MORAN	GOJIN MORAN	PERIODIC	52	476	0B-1K-3L	BARI	
	2. SRI ROKHESWAR MORAN							
	3. SRI PHUKAN MORAN	MONPUR MORAN						
55	1. SRI BHUTUK MORAN		PERIODIC	43	479	4B-3K-14L	B. FORING	
	2. SRI BAUL MORAN							
	3. SRI LOBHIT MORAN	PHEPUR MORAN						
	4. SRI NAGEN MORAN	BISINA MORAN						
56	SRI JONADHAN MORAN	LEHENG MORAN	PERIODIC	63	481	3B-4K-15L	B. FORING	
57	SRI SAHARAI KANDA	GOR MOHAN KANDA	PERIODIC	13	308	12B-4K-8L	B. FORING	
58	1. SRI ABANIKANTA GOHAIN		PERIODIC	83	440	12B-1K-3L	BARI	
	2. SMTI. KETEK GOHAIN	BIRBAR GOHAIN						
	3. SRI HANAGYOTI GOHAIN							
	4. SRI GOLAP JYCTI GOHAIN	BIRBAR GOHAIN						
59	SRI LAKMI MORAN	BAUL MORAN	PERIODIC	140	1213	2B-3K-13L	FORING	
60	SRI PHANINDRA MORAN	DIMBESWAR MORAN	PERIODIC	177	1226	6B-OK-0L	BARI	
61	RATIBAR NEOG	MEWNA	PERIODIC	178	1299	3B-2K-10	B. FORING	
62	SRI SUREN NEOG	PABEN	PERIODIC	202	1320	0B-4K-17L	BARI	
63	SRI DIGANTA MORAN	DIMBESWAR MORAN	PERIODIC	203	1323	1B-3K-13L	BARI	

NDOJ
 04/07/2020
 Circle (1)
 Disarma
 1000M D. 2020

1/07/2020
 04/07/2020

Debar
 1/7/20

GOVT OF ASSAM
OFFICE OF THE CIRCLE OFFICER:::DOOMDOOMA REVENUE CIRCLE
DOOMDOOMA

No, DRC.16/2015-16/Pt/24

Dated Doomdooma the 14th July'2020

To,

The Deputy Commissioner
Tinsukia.

Sub:-

Submission of the final list of houses damaged due to burning under
Baghjan & Dighaltarang gaon near 5 No. Oil Well due to fire
blow out incident dtd 09/06/2020 at Oil leakage site in Baghjan.

Sir,

In inviting a reference to the subject and as per your verbal instruction over telephone, I have the honour to submit herewith the list house damage assessment report submitted by S.K. Lot Mondols and P.W.D.(Building) Division officials, Tinsukia. They have assessed burnt houses near the Baghjan Oil fire blow incident site and on the permitted barricade area in Baghjan and Dighaltarang Gaon under the supervision of Magistrate incharge and overall supervision of respected Additional Deputy Commissioner, Tinsukia and submitted final list of 11 nos of houses burned in Baghjan & Dighaltarang area near oil fire incident site after re-verification

Submitted the report and re-verification list for favour of kind information and necessary action.

Encl:- As stated above.
(Soft copy of photographs
Of assessment)

Yours Faithfully,

NDA
14/07/2020
Circle Officer
Doomdooma Revenue Circle
Doomdooma

SUBMISSION OF FINAL LIST OF HOUSE BURNED IN BAGHJAN & DIGHALTARANG AREA NEAR OIL -FIRE INCIDENT SITE AFTER RE-VERIFICATION BY THE ASSESSMENT TEAM

SL. NO.	NAME OF THE AFFECTED FAMILY
1	Sri Papul Chutia, S/o: Dineswar Chutia
2	Sri Ritu Moran, S/o: Lobheswar Moran
3	Sri Horuful Panging, W/o: Arbinda
4	Sri Deep Saikia, S/o: Lombheswar Saikia
5	Sri Amal Saikia, S/o: Sri Lombheswar Saikia
6	Sri Bikash Saikia, S/o Amal Saikia
7	Sri Sahadev Moran, S/o: Phukan Moran
8	Sri Hemanta Moran, (Umi) S/o: Phukan Moran
9	Sri Lakhindra Moran, S/o: Phukan Moran
10	Sri Munu Mura, S/o: Joy Masi
11	Smti. Labanya Saikia, W/o: Joynath Saikia

R.H.

Base

L.M.

Appli

14/07/2020

*Asst. Executive Engineer
P.W.D. Tinsukia Bldg Sub Div.*

[Signature]

*Deputy Commissioner
TINSUKIA
ADC
TINSUKIA*

*14/07/2020
1. Joint Officer
2. Joint Officer
3. Joint Officer
4. Joint Officer
5. Joint Officer*

Sl. No.	NAME OF AFFECTED PEOPLE	FATHER/HUSBAND NAME	ADDRESS	AREA OF LAND	PATTA NO	DAG NO	OCCUPATION	AFFECTED AREA	REMARKS
1	SRI PAPUL CHUTIA	DIMBESWAR CHUTIA	BAGHJAN	2B-1K	49	204	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
2	SRI RIJU MORAN	LOMBESWAR MORAN	BAGHJAN	1B-13L	455	219	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
3	SARUFUL PANGING	ARBINDA PANGING	BAGHJAN NC	2B-1K	1		CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
4	SRI DEEP SAIKIA	LOMBESWAR SAIKIA	BAGHJAN	1B	453	134 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
5	SRI AMAL SAIKIA	LOMBESWAR SAIKIA	BAGHJAN	2B-2K-10L	453	114 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
6	SRI BIKASH SAIKIA	AMAL SAIKIA	BAGHJAN	4B	454	114 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
7	SRI SAHADEB MORAN	PHUKAN MORAN	BAGHJAN	1B	454	131 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
8	SRI HEMANTA MORAN	PHUKAN MORAN	BAGHJAN	1B	454	131PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
9	SRI LAKHINDRA MORAN	PHUKAN MORAN	BAGHJAN	1B	454	131 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
10	SRI MONU MURA	LT JAIMASI MURA	BAGHJAN	9B	454	GOVT	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
11	SRI LABONAYA SAIKIA	LT JOINATH SAIKIA	BAGHJAN	1B	453	114 PART	CULTIVATION	COMPLETE DESTROYED RESIDENTIAL AREA AND PLANTS	
12	SRI KUNDESWARI BORA	THANESWAR BORA	BAGHJAN	2K-10L	1287/405/406	NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
13	SRI ADITIYA BORA	THANESWAR BORA	BAGHJAN	6B-1B AND 6 B	445/405/406 AND 1 DAG PART	NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
14	SMTI SABITA BORA	BOJEN BORA	BAGHJAN	6B, 1B, 9B, 1 B AND 10 B	1287/405/406 AND 1 DAG PART	NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
15	SMTI MONBHA BORA	CHABORA BORA	BAGHJAN	1 B	457 PART	NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
16	SMTI PUNYALATA BORA	BHOBEN BORA	BAGHJAN	7 B	376 1 DAG PART	2 B NC 5 K	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
17	SRI PANIRAM BORA		BAGHJAN	5 B NC 12	459 DAG PART	3 B 2 NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
18	SRI UMAKANTA BARUAH	LT BHOLANATH BARUAH	BAGHJAN	1251	1 DAG PART	NC	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
19	SRI PULIN CHETIA		BAGHJAN	1B-13L	125		CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	
20	SRI MINTU BORA	LATE BHUWAN BORA	BAGHJAN	2B	NC		CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.	

21	SRI JALIN BORA	LATE BHUWAN BORA	BAGHJAN	1B	NC		CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
22	SRI FOFOLA BORA	LATE BUDHBOR BORA	BAGHJAN	2B		456 PART, 457 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
23	SRI DEBENDRA NEOG	SRI BHADESWAR NEOG	BAGHJAN	3B		408 PART 445	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
24	SRI RAJID NEOG	SRI BHADESWAR NEOG	BAGHJAN	4B-2K-9L		438	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
25	SRI RAJESHWAR HAZARIKA	SRI THELA HAZARIKA	BAGHJAN	3B-16L NC 20B	128	408	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
26	SRI TEMON BORA	LATE MOLOU BORA	BAGHJAN	2B 3K	TB250	466	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
27	SRI PRASANTA BORA	LATE SASHIDHAR BORA	BAGHJAN	1B	TB250	466 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
28	SRI MINAL NEOG	SRI KOFUL NEOG	BAGHJAN	4B		460 PART 458	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
29	SRI PUTUKON MORAN	SRI MAGESWAR MORAN	BAGHJAN	2B		439	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
30	SRI LAKHESWAR NEOG	SRI BHADESWAR NEOG	BAGHJAN	2B-3K-13L	199	451	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
31	SMTI RUPU BORA	LATE KULODHAR BORA	BAGHJAN	1B-2K-14L		456 PART, 457 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
32	SRI DANDESWAR BORA	LATE KULODHAR BORA	BAGHJAN	2B-1X-12L		456 PART, 457 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
33	SRI SANJAY NAGBANSHI	SRI KARTIK NAGBANSHI	BAGHJAN	3B-2K-17L		357	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
34	SRI SUNBABU NAGBANSHI	SRI FISA NAGBANSHI	BAGHJAN	1B		357 PART	FISHER MAN	RESIDENTIAL AREA AND TREE PLANTS ETC.
35	SRI DHANE NAGBANSHI	SRI AGHNU NAGBANSHI	BAGHJAN	1B		357 PART	FISHER MAN	RESIDENTIAL AREA AND TREE PLANTS ETC.
36	SMTI RUJU NAGBANSHI	LATE KALLU NAGBANSHI	BAGHJAN	1B		357 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
37	SRI RUPAM MORAN	SRI RITU MORAN	BAGHJAN	8B NC	219 PART	455 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
38	SRI DULAL NEOG	SRI SUREN NEOG	BAGHJAN	1B-3L		1320 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
39	SRI DHANIRAM NAGBANSHI	LATE TEGHEL NAGBANSHI	BAGHJAN	1B		391 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
40	SRI DIGHAJUA NAGBANSHI	SRI AGHNU NAGBANSHI	BAGHJAN	1B		391 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
41	SMTI DEBI NAGBANSHI	DANLU NAGBANSHI	BAGHJAN	1/2 L		357 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
42	SRI RAJU NAGBANSHI	LATE AGHNU NAGBANSHI	BAGHJAN	1B		391 PART	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.

43	SRI AGHESWAR CHETIA	SRI PULIN CHETIA	BAGHIAN	7B NC22B	391	SERVICE	RESIDENTIAL AREA AND TREE PLANTS ETC.
44	SMTI MOINA NEOG	LATE PREMOT NEOG	BAGHJAN	3B	460	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
45	SMTI MANISHA NEOG	SRI JITU NEOG	BAGHJAN	2B	460	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.
46	SRI KETEKI NEOG	LATE ANAND MORAN	BAGHJAN	4B	462	CULTIVATION	RESIDENTIAL AREA AND TREE PLANTS ETC.

APPENDIX G

LIST OF OIL AFFECTED PERSONS OF BAGHJAN GAS .RES 625 Nos.

Sl. NO	NAME OF THE PERSONS	NAME OF THE GUARDIANS	ADDRESS	NAME OF THE BANK	IFSC CODE	ACCOUNT NO.	Amount to be transferred (in Rs.)
1	MINTU BORAH	BHUBAN BORAH	BAGHJAN GAON	ASSAM GRAMIN VIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010092472	30,000.00
2	KHILA DOHUTIA		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010052003	30,000.00
3	PUTUL NEOG	SUKHEN NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006071	30,000.00
4	KUNDESWARI BORA	THANESWAR BORAH	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010034919	30,000.00
5	TIPESWAR BORAH		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006793	30,000.00
6	MARIYAM MURA	MONUJ MURA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010087841	30,000.00
7	ARUP NEOG		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006977	30,000.00
8	PUTUMONI MORAN	JIBON MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010093198	30,000.00
9	ADITYA BORAH	THANESWAR BORAH	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006905	30,000.00
10	PUTOLJ NAGBONSHI		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010019673	30,000.00

11	KHAGESWAR HAZARIKA	HULA HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010092232	30,000.00
12	BAPPI CHUTIA		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010003119	30,000.00
13	BULAN NEOG	ROTTINEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006225	30,000.00
14	DIPJYOTI HAZARIKA	RATNESWAR HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010102421	30,000.00
15	SANJAY NAGBONSHI	KARTIK NAGBONSHI	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010102551	30,000.00
16	MUKUL MORAN	LABHESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010056072	30,000.00
17	JUNMONI MORAN	ANAJIT MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010041593	30,000.00
18	KARISHMA MORAN	UDIT MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010103978	30,000.00
19	GODA MORAN	OHONIDHAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010002837	30,000.00
20	RENU MORAN	MOHANDO MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010102575	30,000.00
21	KAMLESWAR MORAN	NODE MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010002744	30,000.00
22	JUBOKANTA MORAN	JATIN MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010031611	30,000.00

23	PRALA GOGOI	KULAMON GOGOI	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010006041	30,000.00
24	ROBINA HAZARIKA	NOBIN HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010097714	30,000.00
25	GAGAN MORAN	TIKI MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010006992	30,000.00
26	JUNALI MORAN	LOBON MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010006354	30,000.00
27	LAMBESWAR SAIKIA		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010002789	30,000.00
28	RANGALI BARUAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010061026	30,000.00
29	BITUPON NEOG	RATI NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010093277	30,000.00
30	BONITA GHATUWAR		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010018948	30,000.00
31	PULIN CHETIA	SONIJOY CHETIA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010003140	30,000.00
32	ARUP MORAN	BABULI MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010102650	30,000.00
33	METHONG DOHUTIA	TULON DOHUTIA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010006983	30,000.00
34	RAJESWAR NEOG	BHUGESWAR NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBIORRBAGB	7156010003159	30,000.00

35	TAPON MORAN	BABUL MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010092676	30,000.00
36	RATNESWAR HAZARIKA	HULA HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010003150	30,000.00
37	BOLIN NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062645	30,000.00
38	ABONIKANTA GOHAIN	BIRABOR GOHAIN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010002914	30,000.00
39	KAFUL NEOG	THULA NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010007102	30,000.00
40	KEHE MORAN	SUNESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010042307	30,000.00
41	LOKHIMO MORAN	AKUL BARUAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33711844217	30,000.00
42	NANDESWAR MORAN	SUNESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010002763	30,000.00
43	UMESH PHUKAN	LATE SUNABOR PHUKAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010086286	30,000.00
44	REBOTTI NEOG	SUKLA NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010093134	30,000.00
45	AMULYA MORAN	BABULI MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010092214	30,000.00
46	LUHIT NEOG	BUDHESWAR NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010054232	30,000.00

47	DALUK NEOG		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010019293	30,000.00
48	TUJASHI BARUAH	SENIDHAR BARUAH	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010097769	30,000.00
49	BOBITA BARUAH	SAURAB BARUAH	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010069304	30,000.00
50	UJJALATA HAZARIKA	MONUJ HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010102469	30,000.00
51	AMAL GOGOI	DURLABH GOGOI	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010005441	30,000.00
52	RUDRA NEOG		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010007104	30,000.00
53	SORUMAI MORAN	TITO MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010002860	30,000.00
54	BIPUL NEOG	SIPANG NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006911	30,000.00
55	DIPOK MORAN	LABHOT MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010104425	30,000.00
56	BIPLOB NEOG	DEBENDRA NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010090234	30,000.00
57	DHANSWARI HAZARIKA	DHANIRAM HAZARIKA	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010102681	30,000.00
58	RAJIB NEOG	SIPANG NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010088965	30,000.00

59	NAREN GOGOI		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006042	30,000.00
60	KALIMOTI MORAN		BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010000951	30,000.00
61	NOREN MORAN	MOTESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010006999	30,000.00
62	APURBA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32487347045	30,000.00
63	SARUMAI MORAN	BANKIDHAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010098315	30,000.00
64	PRAKHANTA MORAN	BIDESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010004636	30,000.00
65	HEWALI MORAN	TANESWAR MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010092490	30,000.00
66	RUMI NEOG	BUNDE NEOG	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010066486	30,000.00
67	BIDESWAR MORAN	TOKOU MORAN	BAGHJAN GAON	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	UTBI0RRBAGB	7156010004527	30,000.00
68	HITESWARI MORAN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202130001410	30,000.00
69	MONALISHA BARUAH	POLASH BARUAH	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202120001157	30,000.00
70	NASHMI BARUAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202130001400	30,000.00
71	BHAGYAPOTI NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010052813	30,000.00
72	RITU MORAHN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010059780	30,000.00

73	ANU NEOG & PUBALI NEOG	BOLIN NEOG	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010052803	30,000.00
74	DIPTI MORAN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010052738	30,000.00
75	PUSHPANJALI NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062295	30,000.00
76	ANIMA BORAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202130001178	30,000.00
77	BANALATA NEOG	SUREN NEOG	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010051801	30,000.00
78	PHUKAN MORAN	MONPUR MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010058515	30,000.00
79	RANJAN BARUAH	JUNABOR BARUAH	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010058530	30,000.00
80	PROBHAT MORAN	PHUKAN MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061212	30,000.00
81	MAMAMONI MORAN	PHANIDHAR MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061050	30,000.00
82	ABHITI PHUKAN	KHELANG PHUKAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062305	30,000.00
83	TILOK NEOG		BAGHJAN GAON	INDIAN BANK, TINSUKIA	IDIB000T024	6644497461	30,000.00
84	BIKASH SAIKIA	AMAL SAIKIA	BAGHJAN GAON	INDIAN BANK, TINSUKIA	IDIB000T024	6851197903	30,000.00
85	ALPANA MORAN HAZARIKA		BAGHJAN GAON	APEX BANK, DOOMDOOMA	HDFC0CACAB	451042010008717	30,000.00
86	BULUPROBHA MORAN	LITIP MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31584077580	30,000.00
87	HUNODA BORUAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31341405067	30,000.00
88	TARAMAI NEOG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31302557367	30,000.00
89	JATIN GOGOI PHULESWAR PHUKAN	PURNAKANA T GOGOI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20130541555	30,000.00
90		HOREN PHUKAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20130528432	30,000.00

91	HEMANTA MORAN	LOMBESWAR MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010006711	30,000.00
92	KACHAN NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061079	30,000.00
93	BASANTA NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062646	30,000.00
94	DIPIKA BORAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202130001206	30,000.00
95	MONJIT NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062369	30,000.00
96	ANJU BORAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061084	30,000.00
97	SABITA BORAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010052794	30,000.00
98	RUPOM MORAN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010059030	30,000.00
99	ALESWARI MORAN	PAMESHWAR MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010053405	30,000.00
100	SURAJIT NEOG	PILIYA NEOG	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010062070	30,000.00
101	KITEKI NEOG	ANANDA MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061054	30,000.00
102	KABITA NEOG	PUTUL NEOG	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061049	30,000.00
103	PUNYALATA BORA		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010061085	30,000.00
104	HUNMAJ BORAH		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202130001443	30,000.00
105	DIPALI NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010052801	30,000.00
106	RABINDRA MORAN	LT. LAVOT MORAN	BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011005771	30,000.00
107	BINUD MORAN		BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011003919	30,000.00

108	MAGHESWAR MORAN	LT. MEHENG MORAN	BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011001278	30,000.00
109	SIDARTHA CHETIA		BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450102010007217	30,000.00
110	SAMILA SAIKIA	DEEP SAIKIA	BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011002274	30,000.00
111	DEBOJIT HAZARIKA		BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011006788	30,000.00
112	RUPANTA MORAN	ELESOR MORAN	BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011005815	30,000.00
113	PONITA MORAN	GOKUL MORAN	BAGHJAN GAON	UNION BANK OF INDIA, DOOMDOOMA	UBIN0545040	450402011003478	30,000.00
114	DHONIL NEOG		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	383202010059936	30,000.00
115	NASME GOGOI		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32133613929	30,000.00
116	BINA CHETIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33166068308	30,000.00
117	TILAK MORAN	RUL MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20281895807	30,000.00
118	SOBIN HAZARIKA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	38084859893	30,000.00
119	MINASHEE GOGOI	MOHIRAM GOGOI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32133613929	30,000.00
120	PRIYANKA CHETIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31629471217	30,000.00
121	MAINE MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32277100036	30,000.00
122	MUNMUN CHUTIA	CHAKRESWA R CHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31122242147	30,000.00

123	SUMON PATRA MORAN	PROKHANTA MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32584235554	30,000.00
124	BINDU DEVI	MAHABIR SAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	37117726947	30,000.00
125	TOLIKA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32374750937	30,000.00
126	A. MALLAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	11288550238	30,000.00
127	DEBOJANI MORAN	PROBIN BORAH	BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20050629687	30,000.00
128	BHABESH MORAN	MAGHE MORAN	BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	34401758922	30,000.00
129	REKHAMONI HAZARIKA	TETON HAZARIKA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	3443693612	30,000.00
130	DULAL NEOG		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20397367445	30,000.00
131	PROBIN BORAH		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20050629144	30,000.00
132	BOBY MOHAN MORAN	BARUN MORAN	BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	39162854303	30,000.00
133	RIMA PHUKAN		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	37354558038	30,000.00
134	ANUPAM NEOG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35019219467	30,000.00
135	SATYADHAR MORAN	MAHANANDA MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32047948760	30,000.00
136	BINOMA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31584077535	30,000.00
137	DIPANJALI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34988150289	30,000.00
138	ANNAJIT HAZARIKA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35327326842	30,000.00
139	SOPATI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35876213559	30,000.00
140	DIPU MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36782734036	30,000.00

141	ROJOTI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35117059318	30,000.00
142	MAINU GOGOI		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35117059318	30,000.00
143	LJTESWAR MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32055166997	30,000.00
144	SUSHIL MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	30716260827	30,000.00
145	IMONI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	38459449419	30,000.00
146	PUROBI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33123735919	30,000.00
147	MONIKHA NEOG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34677073443	30,000.00
148	NILESWAR MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32726260059	30,000.00
149	SURESH MALLAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	11288550421	30,000.00
150	RITA MORAN	MILON MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36725033298	30,000.00
151	KAJOLI SAIKIA	AMAL SAIKIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31341405103	30,000.00
152	RJUMONI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32126500345	30,000.00
153	USHJYOTI MORAN	GAJENDRA MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31463738698	30,000.00
154	BISWAJIT SONOWAL	TARUN SONOWAL	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35285096399	30,000.00
155	RAHUL HAZARIKA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36697679401	30,000.00
156	MALOBIKA NEOG	RAJIV NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	37009305987	30,000.00
157	BHUPEN MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	30861798493	30,000.00
158	MINTU MORAN	BOHUT MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33711844137	30,000.00

159	ANIMA BORUAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31259794032	30,000.00
160	PULIN MORAN	TAKAU MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36855121415	30,000.00
161	IMONI MORAN	BIDYUT MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35117059227	30,000.00
162	PUSHPA MORAN	ELESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33232410974	30,000.00
163	MONTU MORAN	JOGESH MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34702176293	30,000.00
164	DHONITA NEOG	PRIYANATH NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31778087840	30,000.00
165	PAPUL MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31123723805	30,000.00
166	KAJOLI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31341405103	30,000.00
167	KHIRUD CHUTIA	REKHAKANT CHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36161796169	30,000.00
168	MALA MORAN	JIT MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31849472220	30,000.00
169	BITUPON NEOG	DEBENDRA NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34736432750	30,000.00
170	BHULEN MORAN	BABIKA MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35653053788	30,000.00
171	MANIK BORUAH	DHANESWAR BORUAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	33705216438	30,000.00
172	LABANYA BORA	SHASHIDHAR BORA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36855121812	30,000.00
173	BHASKAR MORAN	LOLIT MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	38782195565	30,000.00
174	UMAKANTA BORUAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	11288560440	30,000.00
175	DHIREN CHUTIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	38548269582	30,000.00
176	NILU CHUTIA		BACHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34378249932	30,000.00

177	AKHESWAR CHETIA	PULIN CHETIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35283405253	30,000.00
178	HURUFUL PANGING	ARBINDA PANGING	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36063827317	30,000.00
179	KHOGEN MORAN	PORAMESWA R MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20130541566	30,000.00
180	SUNANDA HAZARIKA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31352002359	30,000.00
181	SONALI NEOG	BHOG NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35670079217	30,000.00
182	KUMALI NEOG	GANDHA NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	30966665840	30,000.00
183	PERUNA MORAN	BODAN MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32374753495	30,000.00
184	SATYAJIT MORAN		BAGHJAN GAON	UNITED BANK, TINSUKIA	UTBIN0538329	383202120001420	30,000.00
185	BABUL MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36063827351	30,000.00
186	ASHYUT MORAN	JADUNATH MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32479788044	30,000.00
187	TARA CHUTIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34790166439	30,000.00
188	PUTUMONI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32374752684	30,000.00
189	SHILPI GOGOI	PROKHEN GOGOI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	37101229353	30,000.00
190	MONUMADHAB MORAN	DILIP MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	34352963208	30,000.00
191	TAPAN BARUAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36455873324	30,000.00
192	MUNI GOGOI	MONTU GOGOI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31103671008	30,000.00
193	DIPTI GOGOI	MONTU GOGOI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35333765156	30,000.00
194	GONDHESWAR HAZARIKA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32374752786	30,000.00

195	DOLLEE BORUAH	KULEN BORUAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31835907743	30,000.00
196	DIBAKAR MORAN	LITESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35821081625	30,000.00
197	KALPONA PHUKAN	PODMADHAR PHUKAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20132322928	30,000.00
198	RIJUMONI NAGBONSHI		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31363096903	30,000.00
199	PURNIMA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32386630548	30,000.00
200	MOINA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	32030632197	30,000.00
201	HEUTI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35117059169	30,000.00
202	LABANYA MORAN & DIGANTA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	11288597743	30,000.00
203	BISWAJIT MORAN	LAMBESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20333127667	30,000.00
204	PROBINA SONOWAL	KRITINATH SONOWAL	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20393255269	30,000.00
205	KHANEN MORAN	SONE MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	20393268788	30,000.00
206	MANABHA BORA	CHANDRA BORA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35570079206	30,000.00
207	GENDRA MORAN	SUKHOLATA MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35653053766	30,000.00
208	KANAKLATA DOHUTIA	LALIT DOHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	30874667942	30,000.00
209	RUPA DOHUTIA	KULBOR DOHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	36087722973	30,000.00
210	PUTU MORAN	LAKHESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35907392657	30,000.00
211	PRABINA BARUAH	BHAMAK BARUAH	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010514903	30,000.00

212	DIBYALATA BARUAH	TARUN BARUAH	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010518307	30,000.00
213	GONAMALA HAZARIKA	MONESWAR HAZARIKA	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010515041	30,000.00
214	MONIKA MORAN	JONARDHAN MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010821452	30,000.00
215	RINALI MORAN	RAJESH MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010820905	30,000.00
216	HEMANTI HAZARIKA	GADADHAR HAZARIKA	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010522489	30,000.00
217	PALI GOGOJ	MONOJ GOGOJ	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010706179	30,000.00
218	JURI MORAN	DHIREN MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010874250	30,000.00
219	RITAMONI MORAN	LT. DEBEN MORAN	BAGHJAN GAON	UNITED, TIPUK	UTBIOTIKG88	12560140274852	30,000.00
220	RAJANTINEOG	PILJA NEOG	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010518338	30,000.00
221	RITUMONI MORAN	BIJAN MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010943772	30,000.00
222	ARABINDRA BARUAH	KAMAL BARUAH	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010193108	30,000.00
223	BANDANA MORAN	ANIL MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010508445	30,000.00
224	TUNUMONI MORAN	BIPOB MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010508445	30,000.00
225	MOTI NAMASUDRA		BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010819343	30,000.00
226	BAKHANTI BARUAH	KAMAL BARUAH	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010721479	30,000.00
227	FAGHNI RATA	SONJOY NAGBONSHI	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010789240	30,000.00
228	DOMOTI CHUTIA	RUPOM CHUTIA	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010586351	30,000.00
229	ANITA MORAN	NITESWAR MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010321259	30,000.00

230	BULBULJ MORAN	JUGANTA MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010452816	30,000.00
231	KEHE MORAN	THANESWAR MORAN	BAGHJAN GAON	UNITED, DOOMDOOMA	UTBIODOD316	0015010321389	30,000.00
232	ABOLA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	31305204090	30,000.00
233	MONTU MORAN	BINDESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	0015010814317	30,000.00
234	SILPA NAGRONSHI	MONGLA NAGBONSHI	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	15010715546	30,000.00
235	PRIMPA GOWALA	SANJAY GOWALA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	00150106083312	30,000.00
236	MAINA NEOG	PEMOT NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	0015010320184	30,000.00
237	DIPTI NEOG	DEBESWAR NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	0015010320092	30,000.00
238	ANJANA PARBUNA	PRABUNATH KORUWA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	0015010758864	30,000.00
239	AKONI BORUAH	DINESH BORUAH	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010031021	30,000.00
240	RUNJUN HAZARIKA	BISWAJIT HAZARIKA	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010032123	30,000.00
241	GULESWARI MORAN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010061029	30,000.00
242	MANJULA PHUKAN		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202120001446	30,000.00
243	CHANDRAMA MORAN CHUTIA		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202130001371	30,000.00
244	MONUJ MORAN		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006991	30,000.00
245	MINU GOGOI		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010007768	30,000.00
246	NOGEN HAZARIKA	KEHBOR HAZARIKA	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UTBINO538329	383202010061023	30,000.00

247	LAKHESWAR NEOG		BAGHJAN GAON	BANK OF BARODA, TINSUKIA	BARBOTINSIUK	09998100000958	30,000.00
248	SUBORNA BORUAH	DIPUNJU BORUAH	BAGHJAN GAON	CBI, TINSUKIA	CBIN0281286	3686695160	30,000.00
249	PARISHMITA GOHAIN MORAN	DEPANKAR MORAN	BAGHJAN GAON	CBI, TINSUKIA	CBIN0281286	3743834430	30,000.00
250	NABAKANTA NEOG	ROMEN NEOG	BAGHJAN GAON	CBI, TINSUKIA	CBIN0281286	3768459595	30,000.00
251	SURUJ BARUAH		BAGHJAN GAON	ALLAHABAD BANK, TINSUKIA	ALLA0210463	59149242864	30,000.00
252	PURNAKANTA MORAN	MAGESWAR MORAN	BAGHJAN GAON	ORIENTAL BANK OF DOOMDOOMA	ORBC0100671	06712151003147	30,000.00
253	BHANU NEOG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32378297084	30,000.00
254	DIPALI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32374751001	30,000.00
255	ANAMIKA MORAN HAZARIKA	NILESWAR MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	38198773461	30,000.00
256	BOBY NAGBONSHI		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32386630515	30,000.00
257	PRAKHMONI NEOG	SUBHASH CHETIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32872125055	30,000.00
258	KETEKI NEOG	LANGKE NEOG	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	36009571876	30,000.00
259	RIMA MORAN	BIPIN MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	33883495617	30,000.00
260	MUKTI NATH CHUTIA	DINESWAR CHUTIA	BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	20404229206	30,000.00
261	ARCHANA MORAN	PRANJIT MORAN	BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	35145861386	30,000.00
262	RUNU BORA		BAGHJAN GAON	UNION BANK OF INDIA, TINSUKIA	UBIN0538329	31032765496	30,000.00

263	PANKAJ MORAN	BADON MORAN	BAGHJAN GAON	BANK OF BARODA, TINSUKIA	BARBOTINSIUK	35945049567	30,000.00
264	SWEETY SAIKIA MORAN	BIPLOB MORAN	BAGHJAN GAON	SBI, MAKUM	SBIN0012262	20252353856	30,000.00
265	JODUMONI BORUAH	ATUL BORUAH	BAGHJAN GAON	SBI, NAZIRA TOWN	SBIN0002095	31457222809	30,000.00
266	LABANYA SAIKIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	30462457026	30,000.00
267	ANITA MORAN		BAGHJAN GAON	UNION BANK, TINSUKIA	UBIN0538329	3832021200014660	30,000.00
268	PRANAB NEOG		BAGHJAN GAON	IOB, TINSUKIA	IOBA0000547	054701000007632	30,000.00
269	HOLEN MORAN		BAGHJAN GAON	UNION BANK, TINSUKIA	UBIN0538329	383202010061320	30,000.00
270	MAMPI CHETIA MORAN		BAGHJAN GAON	UNION BANK, TINSUKIA	UBIN0538329	383202010062471	30,000.00
271	DIPIKA MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35653053891	30,000.00
272	GOHAIN	DILIP MALLAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35625306917	30,000.00
273	AMIR NEOG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	20198089245	30,000.00
274	BILESWAR MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	33750452801	30,000.00
275	JUNUMAI MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35715022650	30,000.00
276	PHAGUNI URANG		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	01190017025	30,000.00
277	RUNU MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	36455873482	30,000.00
278	PAPU MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	31584077546	30,000.00
279	RANJAN MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32106334845	30,000.00

280	JATIN MORAN		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010002907	30,000.00
281	MADHURJYA MORAN		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20241460351	30,000.00
282	JONABOR MORAN		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20241460690	30,000.00
283	ANANTA MORA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	32031126180	30,000.00
284	BITU MORAN		BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODDD316	0015010982603	30,000.00
285	HEMONTA MORAN		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006048	30,000.00
286	DEBENDRA NEOG		BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODDD316	00150115449	30,000.00
287	ANITA CHUTIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN0003835	35201946880	30,000.00
288	BITUPOAN MORAN		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	20457566657	30,000.00
289	NOBOJYOTI MORAN		BAGHJAN GAON	UNION BANK, TINSUKIA	UBI0538329	07423331117	30,000.00
290	MINA CHUTIA		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	38084859906	30,000.00
291	DHABANG DAHUTIA		BAGHJAN GAON	UNION BANK, TINSUKIA	UBI0538329	38320201006136	30,000.00
292	RUNU MORAN	BADON MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35876213796	30,000.00
293	HEMONTI MORAN	MADON MORAN	BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODDD316	0015010320030	30,000.00
294	PENDUKI CHUTIA	KEAMESWAR CHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35201946891	30,000.00
295	LALIT MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	20281897746	30,000.00
296	BIPROJYOTI BORUAH	UMESH BORUAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35327326739	30,000.00
297	CHAYANTI BORUAH	UMESH BORUAH	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	36009571923	30,000.00

298	DEEPAK MORAN		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	7156010092685	30,000.00
299	JUNMONI HAZARIKA	ANUP HAZARIKA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35876213729	30,000.00
300	DIPALI MORAN	BIPIL MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	35600081740	30,000.00
301	PRANJAL GOGOI		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	1128856452	30,000.00
302	PRAMILA URANG	PONCHO URANG	BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODOD316	15010884648	30,000.00
303	RUNUMONI MORAN	MONIRAM MORAN	BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODOD316	0015010607643	30,000.00
304	MANISHA SARKAR	RANJIT SARKAR	BAGHJAN GAON	UBI, DOOMDOOMA	UTBIODOD316	0015010478250	30,000.00
305	NIRANTA MORAN	PHUKAN MORAN	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	20393268223	30,000.00
306	LOBOKANTA MORAN	NORESWAR NEOG	BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010092667	30,000.00
307	SUIT NEOG	NORESWAR NEOG	BAGHJAN GAON	UBI, DOOMDOOMA	UTBIN0548979	489702010039397	30,000.00
308	KAHABOR HAZARIKA	KACHARI HAZARIKA	BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004453	30,000.00
309	HIRAKJYOTI CHUTIA		BAGHJAN GAON	SBI, TINSUKIA	SBIN0000196	2012239804	30,000.00
310	DOLOBHA MORAN		BAGHJAN GAON	PNB, TINSUKIA	PUNB0045100	045001700049443	30,000.00
311	BIREN MURAH		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006906	30,000.00
312	GAUTHALI NEOG		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004261	30,000.00
313	AJANTA BORUAH		BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	3255166216	30,000.00
314	IMONI MORAN		BAGHJAN GAON	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010100915	30,000.00
315	DINESWAR CHUTIA	LEHUK CHUTIA	BAGHJAN GAON	SBI, DOOMDOOMA	SBIN00003835	1128856993	30,000.00

316	MALAK HAZARIKA	TORBOR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	71560062170	30,000.00
317	MEENA MORAN	NIPEN MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010508438	30,000.00
318	KEHUDHAR HAZARIKA	PODMESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	32037641785	30,000.00
319	TOMON MORAN	AME MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006988	30,000.00
320	HURAJIT HAZARIKA	PROMEDSWA R HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37048502571	30,000.00
321	SHANTI MORAN	BAJIK MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010585347	30,000.00
322	SUCHENTI MORAN	BOHIBO GOHAIN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010507646	30,000.00
323	UJJAL MORAN	LETUK MORAN	BAGHJAN	ALLAHABAD, TINSUKIA	ALLA0213480	50468397229	30,000.00
324	VELEC CHETIA	TUNESWAR CHETIA	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010533760	30,000.00
325	JOYAMAY MORAN	BIJOY MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	38320210061037	30,000.00
326	NIKHA MORAN	RAJIB MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010507202	30,000.00
327	PRATIBHA MORAN	KHETE MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010508551	30,000.00
328	APURBA HAZARIKA	PANDIT HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	3669768599	30,000.00
329	RIJUMONI MORAN	DIPESWAR MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	15010508544	30,000.00
330	BOGIMOTI DOHUTIA	LT. JAMUNA DOHUTIA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	71156010032647	30,000.00
331	PUNYALOTA HAZARIKA	ANIPON HAZARIKA	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010831376	30,000.00
332	BONJIT HAZARIKA	INDESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35376527643	30,000.00
333	BINANDA MORAN	LETUK MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010092746	30,000.00

334	NIJARA MORAN	LETUK MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	3832010061039	30,000.00
335	REKHA MORAN	BIHUDHAR MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010061053	30,000.00
336	DIPEWAR MORAN	NABEN MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36725033367	30,000.00
337	ALPONA HAZARIKA	GREEN HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010058866	30,000.00
338	SIBAJIT MORAN	TILESWAR MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010062559	30,000.00
339	RAHITA HAZARIKA	JITU HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010061041	30,000.00
340	NIVA MORAN	MOTHONG MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010060063	30,000.00
341	GHANAKANTA MORAN	BHUGESWAR MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36502157058	30,000.00
342	HILESWARI MORAN	MOHENDRA MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34202224522	30,000.00
343	BITUPON CHETIA	TULESWAR CHETIA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35893432842	30,000.00
344	AMAL PRABHA BORUAH	SURESH BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	11288547522	30,000.00
345	SUNESWAR CHETIA	SONIB BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	3221743414	30,000.00
346	BABITA BORUAH	SHASHIDHAR CHETIA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34556709454	30,000.00
347	GEJU CHETIA	GOBIN HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38339129598	30,000.00
348	NAMI HAZARIKA	LETUK MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	20295222278	30,000.00
349						30520396495	30,000.00

350	RABINDRA MORAN	YOGESWAR MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	20275300320	30,000.00
351	MALOBIKA BORAH	LATIK NBORAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	31032844426	30,000.00
352	RUBUL HAZARIKA	NARENDRA HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38463605475	30,000.00
353	ANIMA MORAN	RUHIT KHIUWAL	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	32182913764	30,000.00
354	MAINU MORAN	PUHEN MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	30893988996	30,000.00
355	MEJE CHETIA	SOSHI CHETIA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	7156010032656	30,000.00
356	HUNESWAR HAZARIKA	KEMMO HAZRIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34613885327	30,000.00
357	NOBEN MORAN	BHUGESWAR MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010101578	30,000.00
358	ANTU HAZARIKA	NIRMOL HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35346099439	30,000.00
359	YUPI MORAN	PRANJAL MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37372807007	30,000.00
360	PUTU HAZARIKA	KUMAL HAZARIKA	BAGHJAN	BANDHAN, TINSUKIA	BDBL001506	50180012261292	30,000.00
361	JODUNEOG	HODESWAR NEOG	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010010335	30,000.00
362	JUNALI CHETIA	AMULYA NEOG	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38757064008	30,000.00
363	BHADESWARI MORAN	PANIRAM MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006359	30,000.00
364	HUNESWAR HAZARIKA	TELEKI HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010062143	30,000.00
365	PANDIT HAZARIKA	TOBAR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010010344	30,000.00
366	PILESH HAZARIKA	SHIPANG HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36341944637	30,000.00
367	MODHIE HAZARIKA	HITESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36417066043	30,000.00

368	MUNINDRA HAZARIKA	HITESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36528021606	30,000.00
369	JANITA HAZARIKA	REPAN HAZARIKA	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010586818	30,000.00
370	SURABHI MORAN	PANIRAM MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	33981679863	30,000.00
371	JEOTI MORAN	ROTHESWAR MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37740166324	30,000.00
372	NIRMAL HAZARIKA	LT. KEM HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34556708790	30,000.00
373	KHAHULI MORAN	RAHESWAR MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010967815	30,000.00
374	JAYA MORAN	DOUL MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	383202120001474	30,000.00
375	MAINI NEOG	RANJIT NEOG	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	31081677498	30,000.00
376	JITUL BORUAH	MONIKANTA BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38551700661	30,000.00
377	MIMI HAZARIKA	RUMI HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	31329478338	30,000.00
378	DIPAK MORAN	NOBEN MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	32492121415	30,000.00
379	SUKHESWAR HAZARIKA	KEMO HAZARIKA	BAGHJAN	UBI, DOOMDOOMA	UBIN0545040	450402011004106	30,000.00
380	JUGESWAR MORAN	LT. SHINGORA MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010044767	30,000.00
381	JAYANTI MORAN	KUNINDRA MORAN	BAGHJAN	UBI, TINSUKIA	UBIN0538329	383202010061040	30,000.00
382	NOMITA BORAH	DADAN BORAH	BAGHJAN	UBI, DOOMDOOMA	UBIN0545040	450402011003913	30,000.00
383	SABITA MORAN	CHUCHEN MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010507226	30,000.00
384	TIPI MORAN	BOLU MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010321419	30,000.00

385	ROMESH HAZARIKA	CHIPONG HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	33285279822	30,000.00
386	MONTU BORUAH	MONIKANTA BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	20132319993	30,000.00
387	PADMESWAR HAZARIKA	LT. TOBOR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010003020	30,000.00
388	MALAKA MORAN	PEMU MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010095868	30,000.00
389	PALLABI MORAN	TARENG MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010585262	30,000.00
390	RUPAHI MORAN	GODUBAR MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010507639	30,000.00
391	ANUBALA MORAN	BARENDRA MORAN	BAGHJAN	UBI, TINSUKIA	UBIN0538329	383202010061119	30,000.00
392	LUHAI CHETIA	MOHESWAR CHETIA	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	0015010114950	30,000.00
393	JOYONTI MORAN	DHIREN MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	34202224533	30,000.00
394	ARUP MORAN	KHOGEN MORAN	BAGHJAN	AXIS BANK LTD, DOOMDOOMA	UTIB0003219	919010014865260	30,000.00
395	MAMONI DEKA	RUPOM DEKA	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	36855121958	30,000.00
396	KABITA BORUAH	ANIL BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	31302557356	30,000.00
397	SOJILA HAZARIKA	RENESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	37556691310	30,000.00
398	BITUL HAZARIKA	NORENDRA HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010102674	30,000.00
399	DIPALJ BORA	N. BORA	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	30756875118	30,000.00
400	NADAY CHETIA	TUNESWAR CHETIA	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	37196257776	30,000.00
401	KAMAL BORUAH	DHONESWAR BORUAH	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	15010110900	30,000.00
402	BIMAL MORAN	HINGARA MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN003835	31067878024	30,000.00

403	ANITA HAZARIKA	INDESWAR HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010062267	30,000.00
404	JONALI MORAN	BASANTA MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010061118	30,000.00
405	KARISHMA MORAN	BITUL MORAN	BAGHJAN	UBI, DOOMDOOMA	UTBIODOD316	15010511933	30,000.00
406	DIPEN HAZARIKA	HUNESWAR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010010520	30,000.00
407	POBITRA HAZARIKA	JON HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38803622098	30,000.00
408	MOTESWAR MORAN	BHUGESWAR MORAN	BAGHJAN	UNION, DOOMDOOMA	UBIN0545040	450402011000045	30,000.00
409	PIKUMONI MORAN	BODON MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	33621098144	30,000.00
410	MINESWARI DOHUTIA	PABITRA DOHUTIA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	715601000463	30,000.00
411	ATUL CHETIA	TUNESWAR CHETIA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010093329	30,000.00
412	ILABATI HAZARIKA	LETUK HAZARIKA	BAGHJAN	UBI,DOOMDOOM A	UTBIODOD316	15010485220	30,000.00
413	JITUKON NEOG	HODESWAR NEOG	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010007081	30,000.00
414	NABAJIT HAZARIKA	NALI HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38551670089	30,000.00
415	PADMESWARI HAZARIKA	MOHIN HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010061035	30,000.00
416	BHONIMAL MORAN	SHYAMAL MORAN	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010061048	30,000.00
417	CHANTI MORAN	PUNESWAR MORAN	BAGHJAN	UBI,DOOMDOOM A	UTBIODOD316	15010545136	30,000.00
418	DIBYAJYOTI HAZARIKA	MAZIN HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010016038	30,000.00
419	JUGESWARI HAZARIKA	RAJANI HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006667	30,000.00
420	JADAB CHETIA	JAYANTA CHETIA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38797347546	30,000.00

421	MUNU MORAN	MILONJYOTI MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37372806693	30,000.00
422	RUPATI MORAN	KANTESWAR MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35876213774	30,000.00
423	BIHUTI HAZARIKA	KHIRESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	7156010045641	30,000.00
424	TILESWAR MORAN	LT. PECH MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010045474	30,000.00
425	RUNJUN GOGOI	KULSING GOGOI	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	33876213548	30,000.00
426	PROBIN MORAN	LT. TAKOU MORAN	BAGHJAN	UNION, DOOMDOOMA	UBIN0545040	450402010005869	30,000.00
427	MUKUT CHETIA	JOYONTO CHETIA	BAGHJAN	CBI, TINSUKIA	CBIN0281286	3795101503	30,000.00
428	HANTESWAR MORAN	LT. AME MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	31783063526	30,000.00
429	DOLIN HAZARIKA	LT. RUPEN HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	8156010003856	30,000.00
430	NALI HAZARIKA	SABE HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	3650217423	30,000.00
431	HUNMONI MORAN	BOKUL MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	32630860803	30,000.00
432	BANDITA MORAN	HUNESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	20393254822	30,000.00
433	DHONESWAR MORAN	PENU MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	8156010006345	30,000.00
434	MOSHILA HAZARIKA	MANOJ HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010052748	30,000.00
435	INDRAJIT HAZARIKA	PODMESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37165555407	30,000.00
436	RAJU BORAH	RAJENDRA BORAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	38922277066	30,000.00
437	DULAN BORAH	RAJEN BORAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35893432820	30,000.00
438	BIRESWARI BORUAH	SIPANG HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	30525070637	30,000.00

439	PATOLI BORAH	RAJEN BORAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37278363522	30,000.00
440	PADMESWAR HAZARIKA	JILJK HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36528021708	30,000.00
441	SUBHAJIT HAZARIKA	PODMESWAR HAZARIKA	BAGHJAN	ALLAHABAD, DOOMDOOMA	ALLA0213352	50373994062	30,000.00
442	AROTI MORAN	POSAN MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	31341405250	30,000.00
443	THANESWAR MORAN	HIRENDRA MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010064567	30,000.00
444	BOBY MORAN	ATUL MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	33621098097	30,000.00
445	KANAK MORAN	MOLOKA MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010102698	30,000.00
446	GOJEN MORAN	TILESWAR MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36341945007	30,000.00
447	UMESH BORUAH	LAGHIT BARUAH	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006947	30,000.00
448	NIRMOLA NEOG	HODE NEOG	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010024107	30,000.00
449	ARUN HAZARIKA	INDESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36092709295	30,000.00
450	PRIYADA MORAN	POUSHO MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34907263027	30,000.00
451	BISHWAJIT HAZARIKA	PRAMESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	33981679750	30,000.00
452	PINKY NEOG	MITHU NEOG	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	37117727033	30,000.00
453	HOPUNJYOTI BORAH HAZARIKA	HEMONTA HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	36237627016	30,000.00
454	PRABIN HAZARIKA	LOBHESWAR HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35715022457	30,000.00
455	BOHAGI HAZARIKA	RUMOI HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004258	30,000.00

456	AROTI CHOWRAK	BAPUKON CHAOTWRAK	BAGHJAN	UNITED, MAKUM	UTBI0MKM344	19010114808	30,000.00
457	NIRMALI BORUAH	NAGENDRA BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35876213785	30,000.00
458	NITUMONI BORUAH	MANAB BORUAH	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35217481269	30,000.00
459	PANIRAM BORA	RAJESWAR BORA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	8156010103534	30,000.00
460	PRANITA HAZARIKA	PIJIK HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	3212913719	30,000.00
461	MAINA DEKA	ARUN DEKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202130001144	30,000.00
462	BHANU HAZARIKA	NARENDRA HAZARIKA	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35876213649	30,000.00
463	GEL HAZARIKA	KANTESWAR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004596	30,000.00
464	PRAKASH HAZARIKA	PANDIT HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	7156010018267	30,000.00
465	RUPALI HAZARIKA	MIDUL HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	383202010059510	30,000.00
466	ADITYA MORAN	AME MORAN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010092515	30,000.00
467	LATOI HAZARIKA	JONE HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010032638	30,000.00
468	UJALATA CHUTIA HAZARIKA	NABAJIT HAZARIKA	BAGHJAN	UNION, TINSUKIA	UBIN0538329	38322130001430	30,000.00
469	HELOSHEE MORAN	LAKHESWAR MORAN	BAGHJAN	CBI	CBIN0283221	3185498659	30,000.00
470	DHAMAN MORAN	NODE MORAN	BAGHJAN	UNITED, DOOMDOOMA	UTBIODOD316	0015010115053	30,000.00
471	SEWALI DEKA	BOKUL DEKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004237	30,000.00
472	JUNABOR BARUAH		BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004454	30,000.00
473	HIRABJYOTI GOGOI	NARAN GOGOI	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	34677073851	30,000.00

474	LILABATI HAZARIKA	PODMESWAR HAZARIKA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010084233	30,000.00
475	KETEKI GOHAIN	BIRBOR GOHAIN	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010065724	30,000.00
476	ALIMI MORAN	JUGANTA MORAN	BAGHJAN	UNION, TINSUKIA	UTBIN0538329	383202010059223	30,000.00
477	AKHESWAR CHETIA	PULIN CHETIA	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010100663	30,000.00
478	JANTU MORAN	JADUNATH MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	32047951331	30,000.00
479	PRANAMI MORAN	SUSHANTA MORAN	BAGHJAN	ALLAHABAD, DOOMDOOMA	ALLA0213352	59148947058	30,000.00
480	NAMITA MORAN	GOGON MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	35541068492	30,000.00
481	DILIP MORAN	AANAN MORAN	BAGHJAN	UBI, TINSUKIA	UBIN0538329	383202010062717	30,000.00
482	TUTUMONIDEY	MOSUBASH DEY	BAGHJAN	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010044721	30,000.00
483	RIJUMONI HAZARIKA	AKON MORAN	BAGHJAN	SBI, DOOMDOOMA	SBIN0003835	30885436058	30,000.00
484	GITIMONI DOHUTIA	HEM CHENDRA DOHUTIA	BAGHJAN	SBI, MAKUM	SBIN0012262	31341197883	30,000.00
485	PRADIP KUMAR BARUAH	DHAMAJAN BARUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	11288609976	30,000.00
486	KISHORE HAZARIKA	LT. DIMBESWAR HAZARIKA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010000266	30,000.00
487	ANUPAM NEOG	POTAB NEOG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	38478775326	30,000.00
488	PRONATI NEOG	PROTAP NEOG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20333124214	30,000.00
489	DIPOK KOIRU	LOKHYA KOIRI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010042884	30,000.00
490	BABUL URANG	LT. POBON URANG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010072928	30,000.00

491	BHADRA GOGOI	KULODHAR GOGOI	DIGHALTA RANG	SBI, TINSUKIA	SBIN0007382	34176399238	30,000.00
492	KOLYAN JYOTI BORUAH	PRODIP K BORUAH	DIGHALTA RANG	SBI, HIJUGURI	SBIN000196	20003638973	30,000.00
493	ANJALI URANG	BHIU URANG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	20241460656	30,000.00
494	LAKHI PATOR	LAKHIT PATOR	DIGHALTA RANG	BANDHAN, TINSUKIA	BDBL0001506	71560100188850	30,000.00
495	MANGLI URANG	PROBAN URANG	DIGHALTA RANG	UNITED, DOOMDOOMA	UTBIODOD316	50170019240090	30,000.00
496	DILBOR KOIRI	SIWAPRASAD KOIRI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	15010885065	30,000.00
497	RAJU KOIRI	DILBOR KOIRI	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	7156010000792	30,000.00
498	BOISHALI URANG	BHADO URANG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010044624	30,000.00
499	MAHESWARI GHATUWAR	SUNU GHATUWAR	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31616446978	30,000.00
500	MANJUMONI CHETIA	KULADHA CHETIA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31860036628	30,000.00
501	DIPEN BORUAH	MONIKANTA BORUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	30456023617	30,000.00
502	RUPALI HAZARIKA	DIMBESWAR HAZARIKA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20132325634	30,000.00
503	DIMBESWAR BARUAH	MONIKANTA BORUAH	DIGHALTA RANG	UNION, TINSUKIA	UBIN0538329	383202010062340	30,000.00
504	PANCHA URANG	LALIT URANG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	34298928571	30,000.00
505	RENU GOOGI	KIRAN GOGOI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010104432	30,000.00
506	MANJU KHERUWAR	HONU KHERUWAR	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010102667	30,000.00
507	JAMUNA KR. SAHANI	RABINDRA SAHANI	DIGHALTA RANG	SBI, DULIAJAN	SBIDOD0005062	506210110001112	30,000.00
508	JAMUNA SAHANI	TRIBHUBAN SAHANI	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015010462488	30,000.00

509	SEEMA DEVI	DENESH SAHANI	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015010761468	30,000.00
510	KAMALA KOIRI	MARMU KOIRI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010103275	30,000.00
511	LALITA SAHANI	SARADA SAHANI	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	15010507738	30,000.00
512	BABITA PHUKAN	BISWAJIT PHUKAN	DIGHALTA RANG	CANARA, TINSUKIA	CNRB0001152	1152108016707	30,000.00
513	RUKMINI KHEUWAR	BHADRA KHERUWAR	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	15010454483	30,000.00
514	SONJIB MOHAN	TULON MOHAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	11288661256	30,000.00
515	ABHIRAJ MOHAN	TULON MOHAN	DIGHALTA RANG	SBI, TINSUKIA	SBIN000196	20077357260	30,000.00
516	ANIL CHETIA	MANIK CHETIA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004560	30,000.00
517	KIRAN KR. BAILUNG	DINA BAILUNG	DIGHALTA RANG	ANDHARA BANK, TINSUKIA	ANDB0001811	18110100012914	30,000.00
518	FAGU URANG	LALIT URANG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	34352963297	30,000.00
519	KARUNA MOHAN	TULON MOHAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	30318385363	30,000.00
520	GITANJALI PHUKAN	PADMADHAR PHUKAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31540800697	30,000.00
521	KANAK PHUKAN	PADMADHAR PHUKAN	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	383202010089222	30,000.00
522	SIJEE SAHANI	BABULAL SAHANI	DIGHALTA RANG	AGVR, DOOMDOOMA	UTBIORRBAGB	001580183077914	30,000.00
523	MONIKHA GOGOI	PRASANTA GOGOI	DIGHALTA RANG	IDBI, TINSUKIA	IBKL0001122	112210400008132	30,000.00
524	GOLAP KOIRI	LOKHYA KOIRI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	BSB-1540	30,000.00
525	FULAMOTI SAHANI	RABINDRA SAHANI	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	15010454476	30,000.00
526	LOLITA GHATUWAR	NOKUL GHATUWAR	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010092454	30,000.00

527	CHANDRAMA NEOG	PROTAP NEOG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010099095	30,000.00
528	NIRADA BAILUNG	LT. DINA BAILUNG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	34378250200	30,000.00
529	SUKHANI URANG	KRISHNA URANG	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODDD316	0015010508360	30,000.00
530	ARJUN GHATUWAR	SUNU GHATUWAR	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006044	30,000.00
531	DULIMONI BORUAH	HAREN BORUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31341405409	30,000.00
532	AJOY KHERUWAR	MOTILAL KHERUWAR	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010024082	30,000.00
533	REKHA KHERUWAR	RAJEN KHERUWAR	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODDD316	0015010451178	30,000.00
534	HEROKJYOTI BORUAH	RAJEN BORUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	30871913266	30,000.00
535	BHABEN BARUAH	ANDESWAR BARUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	3664310041	30,000.00
536	JANKI URANN	BISAL URANG	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODDD316	0015010917902	30,000.00
537	MANAKHI BAILUNG	NANDESWAR BORAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31083190935	30,000.00
538	CHANDANA RAI	SURAJ SAHANI	DIGHALTA RANG	ALLAHABAD, TINSUKIA	ALLA0210463	59114235788	30,000.00
539	TITUCHETIA	ANIL CHETIA	DIGHALTA RANG	IDBI, TINSUKIA	IBKL0001122	1122104000073950	30,000.00
540	ANU BAILUNG	BIMAL BAILUNG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010030083	30,000.00
541	BOBITA DIHINGIA	TULON DIHINGIA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	30915662011	30,000.00
542	KIRAN GOGOI	GRFEN GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN00003835	36697678066	30,000.00
543	RATUL NEOG	KANDESWAR NEOG	DIGHALTA RANG	ALLAHABAD, TINSUKIA	ALLA0210714	5023858274	30,000.00
544	RINA MOHAN	TULON MOHAN	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010021553	30,000.00

545	MUNU GOGOI	MINTU GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	32055168951	30,000.00
546	NIRU GOGOI	SHISURAM GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	36563053835	30,000.00
547	MATLU URANG	PABAN URANG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010102629	30,000.00
548	POOJA URANG	AJOY URANG	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015010885096	30,000.00
549	BETEK URANG	JIMI URANG	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015010885072	30,000.00
550	CHUNILAL KOIRI	SAINA KOIRI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	715601002491	30,000.00
551	USHA DEY GOGOI	BHIMKANTA GOGOI	DIGHALTA RANG	UBI, TIPIK	UTBIORRN484	1256010212328	30,000.00
552	HEMOLOTA DAS GOGOI	PROFULLA DAS	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	1224010179973	30,000.00
553	RANUMAI GOGOI	ANIL GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31582190756	30,000.00
554	BUDHNI KHERUWAR	MATILAL KHERUWAR	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	001501045442	30,000.00
555	NUMALI BAILUNG	SIVANATH BAILUNG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010099439	30,000.00
556	JUNALI URANG	BITEN URANG	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015011001103	30,000.00
557	SANDANA GOGOI	ANIL GOGOI	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	716010092764	30,000.00
558	PRODIP PHUKAN BAILUNG	SIVA BAILUNG	DIGHALTA RANG	UNION, TINSUKIA	UBIN0538329	3832202010059780	30,000.00
559	BIREN GOOGI	ANIL GOGOI	DIGHALTA RANG	UCO, TINSUKIA	UCBA0000546	5460110029732	30,000.00
560	MADHURYA GOGOI	HEMONTA GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20198087500	30,000.00
561	SARAT DIHINGIA	TUNIRAM DIHINGIA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31412483070	30,000.00

562	ARPINA URANG	SANJAY URANG	DIGHALTA RANG	UBI, DOOMA	UTBIODOD316	0015010788120	30,000.00
563	SUSHIL BAILUNG	BIMAL BAILUNG	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20130539986	30,000.00
564	JITUL GOGOI	LAKHI GOGOI	DIGHALTA RANG	UNION, TINSUKIA	UBIN0538329	383202010062342	30,000.00
565	KANAK BURAGOHAIN	BHUBAN BURAGOHAIN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31480644403	30,000.00
566	BHUPEN BURAGOHAIN	LOKHI NURAGOHAIN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	11288576449	30,000.00
567	RANJIT GOGOI	LOKHI GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	32366188206	30,000.00
568	DULEN CHANDRA GOGOI	LOKHI GOGOI	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20130532970	30,000.00
569	JITU DIHINGIA	TUNIRAM DIHINGIA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010007058	30,000.00
570	PREMOLATA BORUAH	MONIKANTA BORUAH	DIGHALTA RANG	UBI, DOOMDOOMA	UTBIODOD316	0015010988049	30,000.00
571	DIPALI DIHINGIA	SUKHESWAR DIHINGIA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010002796	30,000.00
572	BOJIT MORAN	TOK MORAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	33750452721	30,000.00
573	MOINA BORUAH	LAKHINATH BORUAH	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7159010078861	30,000.00
574	HOMEN MORAN	LITESWAR MORAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	35821081580	30,000.00
575	PROMITA NEOG	ROMEN NEOG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010074242	30,000.00
576	MATARINEOG	THUNUKA NEOG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010054719	30,000.00
577	MAMONI BAILUNG	LACHIT BAILUNG	DIGHALTA RANG	ANDHARA BANK, DOOMDOOMA	ANDB0001811	18111100045541	30,000.00

578	KEJE HAZARIKA		DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006348	30,000.00
579	SWAPNAJYOTI MORAN		DIGHALTA RANG	HDFC, DOOMDOOMA	HDFC0003831	50100150968530	30,000.00
580	AMITI BORUAH		DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010006347	30,000.00
581	PARASHMONI BORUAH	NUMAL BORUAH	DIGHALTA RANG	SBI, MAKUM	SBIN0012262	31979954534	30,000.00
582	MALA GOHAIN	BHUBAN GOHAIN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	31032824205	30,000.00
583	BONKHIDHAR BORUAH	BHUMESWAR BORUAH	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	32495566778	30,000.00
584	NAYANMONI DOHUTIA	KULBO DOHUTIA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	38352930557	30,000.00
585	ANITA HAZARIKA	MOLEN HAZARIKA	DIGHALTA RANG	SBI, DANGARI	SBIN0007384	34492477988	30,000.00
586	NELESWARI HAZARIKA	HITESWAR HAZARIKA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010003872	30,000.00
587	ANITA MORAN	PILESWAR MORAN	DIGHALTA RANG	UNITED, DOOMDOOMA	UTBIODOD316	15010984515	30,000.00
588	ANJALI HAZARIKA	PODMESWAR HAZARIKA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010098722	30,000.00
589	NIRAMA DOHUTIA	MODEL DOHUTIA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	33273767450	30,000.00
590	KHAGESWARI HAZARIKA	KEMO HAZARIKA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010004595	30,000.00
591	ANU DEKA	BADOL DEKA	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	33855641981	30,000.00
592	NIMANTA BORAH	BHARAT BORAH	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	8156010006994	30,000.00
593	GUNOBOTI HAZARIKA	ROTNESWAR HAZARIKA	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010072405	30,000.00
594	PRABITI HAZARIKA		DIGHALTA RANG	APEX BANK, DOOMDOOMA	HDFCOCACAPL	451042010003998	30,000.00
595	KUMALI MORAN	HAHODEV MORAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	35327326864	30,000.00

596	NILIMA MORAN	ARUN MORAN	DIGHALTA RANG	SBI, TINSUKIA	SBIN0000196	33252535831	30,000.00
597	PAPU MORAN		DIGHALTA RANG	UNION, TINSUKIA	UBIN0538329	383202010062467	30,000.00
598	TULUKI BORUAH	TANKESWAR BORUAH	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBJORRBAGB	7156010006894	30,000.00
599	USHA BORUAH		DIGHALTA RANG	CBI, TINSUKIA	CBIN0281286	3699172439	30,000.00
600	RIPUJIT MORAN	MODON MORAN	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	35210946755	30,000.00
601	PANKAJ CHUTIA		DIGHALTA RANG	UNION BANK	UBIN0538329	383202130001318	30,000.00
602	MANINDRA SARKAR		DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	20132319427	30,000.00
603	UDIT MORAN		DIGHALTA RANG	ALLAHABAD, TINSUKIA	ALLA0210463	50198684707	30,000.00
604	DHORMESWAR CHETIA		DIGHALTA RANG	UNION BANK	UBIN0545040	151010111055	30,000.00
605	LABANYA MORAN		DIGHALTA RANG	BANDHAN, TINSUKIA	BDBL0001506	50880007234654	30,000.00
606	DIPIKA MORAN		DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	34695508996	30,000.00
607	PARI MORAN	KHAGEN MORAN	DIGHALTA RANG	SBI, MAKUM	SBIN0012262	37122540922	30,000.00
608	MITALI MORAN		DIGHALTA RANG	BANDHAN, TALAP	BDBL0001150	50180021852611	30,000.00
609	NIMIKHA MORAN HAZARIKA		DIGHALTA RANG	UNITED BANK	UTBI0DOD316	0015010967853	30,000.00
610	MINAKSHI BORUAH	TAPON BARUAH	DIGHALTA RANG	SBI, MAKUM	SBIN0012262	35213452561	30,000.00
611	MODI CHUTIA	MAJID	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	36138790620	30,000.00
612	KARABI BAILUNG	BISWAJIT BAILUNG	DIGHALTA RANG	ANDHA BANK, TINSUKIA	ANDB0001811	31083190946	30,000.00

613	MOHESH GHATOWAR	SUNU GHATOWAR	DIGHALTA RANG	SBI, DOOMDOOMA	SBIN0003835	7156010006895	30,000.00
614	DIPALI URANG	DOM URANG	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010098777	30,000.00
615	MANJIT BARUA	NUMAL BORUAH	DIGHALTA RANG	AGVB, DOOMDOOMA	UTBIORRBAGB	7156010000729	30,000.00
						Rs.	1,84,50,000.00

616	CHIRONJIT GOOGI	POLA GOGOI	BAGHJAN				
617	DHONI NAGBONSHI	AGHUNI	BAGHJAN				
618	NOBIN NEOG	LANKE NEOG	BAGHJAN				
619	TRIDIP KIRON MORAN	DHOMEN MORAN	BAGHJAN				
620	MONUJ GOGOI	KIRAN GOGOI	BAGHJAN				
621	MIYA KHERUWAR	TELAW KHERUWAR	BAGHJAN				
622	RUPU URANG	DRUGA URANG	BAGHJAN				
623	HORILAL URANG	DRUGA URANG	BAGHJAN				
624	KISHAA URANG	GHASEE URANG	BAGHJAN				
625	KAMINI NEOG	HUKHEN NEOG	BAGHJAN				

DETAILS OF ACCOUNT NUMBERS OF GATE LINE M.E.SCHODD... AT BAGHJAN GAON 25 Nos.

Sl. No.	Name of Beneficiary	Guardian's Name	Branch	Account No	IFSC Code	Amount to be transferred (in Rs.)
1	Smt Mamoni Nagbanshi	W/o Tarun Nagbanshi	UBI, Doomdooma	15011007718	UTBI00D0316	30,000.00
2	Smt Somari Nagbanshi	W/o Koiru Nagbanshi	Doomdooma	15010998819	UTB100D316	30,000.00
3	Smt Kuhi Nagbanshi	W/o Jiten Nagbanshi	Doomdooma	36725033436	SBIN0003835	30,000.00
4	Smt Mina Nagbanshi	W/o Gunaram Nagbanshi	Doomdooma	36725033403	SBIN0003835	30,000.00
5	Smt Mina Nagbanshi	W/o Bijoy Nagbanshi	Doomdooma	36782734423	SBIN0003835	30,000.00
6	Smt Rina Lakiya	W/o Lakiya Karuwa	Doomdooma	15010759106	UTB100D316	30,000.00
7	Smt Sobina Nagbanshi	W/o Bishram Nagbanshi	Doomdooma	15010992138	UTB100D316	30,000.00
8	Smt Monika Nagbanshi	W/o Bijen Nagbanshi	UBI, Doomdooma	15011007745	UTB100D316	30,000.00
9	Smt Ranjita Nagbanshi	W/o Sujit Nagbanshi	Doomdooma	15010827546	UTB100D316	30,000.00
10	Smt Tulshi Chelta	W/o Bishnu Nagbanshi	Doomdooma	15010745697	UTB100D316	30,000.00
11	Smt Anita Purani	W/o Monjit Bhuyan	Doomdooma	15010327195	UTB100D316	30,000.00
12	Smt Birsi Bhachulal	W/o Bhachulal Tanti	Doomdooma	20393268472	SBIN0003835	30,000.00
13	Smt Birochmoni Nagbanshi	W/o Liten Nagbanshi	UBI, Doomdooma	15011007736	UTB100D316	30,000.00
14	Smt Suramoni Nagbanshi	W/o Paleswar Nagbanshi				A/F
15	Smt Bonita Nagbanshi	W/o Laba Nagbanshi				A/F
16	Sri Bijoy Tanti (Sabita Tanti)	S/o Uday Tanti	Tipuk	12560103636	UTBI0TKG08	30,000.00
17	Smt Chandika Tandia	W/o Debedhar Tandia	Doomdooma	36528021991	SBIN0003835	30,000.00
18	Smt Lusni Tandia/ Smt Sandhiya Tanti	W/o Kuttipati Tandia	Doomdooma	35246928698	SBIN0003835	30,000.00
19	Smt Anima Ekka	W/o Jeslam Ekka	Doomdooma	34030855845	SBIN0003835	30,000.00
20	Smt Ranjita Nagbanshi	W/o Samir Nagbanshi	Doomdooma	15010886604	UTB100D316	30,000.00
21	Smt Sobina Munda	W/o Anil Munda	Doomdooma	15010880718	UTB100D316	A/F
22	Smt Albina Nagbanshi	W/o Bhim Nagbanshi	Doomdooma			30,000.00
23	Sri Lakhindra Nagbanshi	S/o Jaharsai Nagbanshi				A/F
24	Smt Lakhimoni Nagbanshi	W/o Dhimon Nagbanshi				A/F
25	Sri Tinku Nagbanshi	S/o Biru Nagbanshi	Doomdooma	36725033414	SBIN0003835	30,000.00
						Rs. 6,00,000.00

Resubmitted Dated Tinsukia the 14th July, 2020

Resubmitted Dated Tinsukia the 14th July, 2020

Resubmitted Dated Tinsukia the 14th July, 2020

LIST OF OIL AFFECTED PERSONS AT S.T. JOSEPH SCHOO CAMP OF BAGHJAN GAON AREAS 73 Nos.

Sl. NO	NAME	FATHER/HUSBA ND	AREA	BANK NAME	IFSC CODE	BANK A/C NO	Amount to be transferred (in Rs.)
1	MRS KANSHI NAGBANSHI	SRI CHUSIN NAGBANSHI	ST JOSEPH SCHOOL	SBI	SBIN003835	36697678340	30,000.00
2	MRS BELMOTI NAGBANSHI	SRI SONIRAM NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTB10DOD316	0015010540094	30,000.00
3	MRS PILI NAGBANSHI	SRI SANJAY NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTB10DOD316	0015010944618	30,000.00
4	MRS RADHIKA GOWALA	SRI BHULA GOWALA	ST JOSEPH SCHOOL	UBI	UTB10DOD316	0015010514910	30,000.00
5	MRS ARTI GOWALA	SRI MAJAN GOWALA	ST JOSEPH SCHOOL	UBI	UTB10DOD316	0015010447737	30,000.00
6	SRI SAMIR NAGBANSHI	SRI MAGHURAM NAGBANSHI	ST JOSEPH SCHOOL	AGVB	UTBIORRBAGB	7156010103602	30,000.00
7	MRS CHURIKA GOWALA	SRI RAJA GOWALA	ST JOSEPH SCHOOL	UBI	UTBIODOD630	0760010268134	30,000.00
8	MRS ANJALI GOWALA	SRI RUBEN GOWALA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010745994	30,000.00
9	SMT SIYA NAGBANSHI	SRI GOPI NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010797078	30,000.00
10	MRS JAYA NAGBANSHI	SRI BIJOY NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010822503	30,000.00
11	MRS RUPALI NAGBANSHI	SRI GOBIN NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010447720	30,000.00
12	MRS MILA GOWALA	SRI GOPI GOWALA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010837755	30,000.00
13	SRI AJAY GOWALA	SRI SADHAN GOWALA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010540124	30,000.00
14	SRI PHULLA GOWALA	KULAMON GUWALA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010323673	30,000.00
15	MRS BHERI NAGBANSHI	RATAN NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010537193	30,000.00
16	MRS ANITA NAGBANSHI	BIJOY NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010706001	30,000.00

17	MRS RUBEN GOWALA	PUNISHING GOWALA	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010540209	30,000.00
18	MRS RUKMONI MURA	BASU MURA	ST JOSEPH SCHOOL	UBI	UBIN0545040	03759240610	30,000.00
19	MRS GITA GOWALA	BIJOY GOWALA	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010884372	30,000.00
20	SRI DILESWAR MURAH	RAJEN MURAH	ST JOSEPH SCHOOL	SBI	SBIN0003835	35907392726	30,000.00
21	MRS RAIMONI MURA	RAJEN MURAH	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010400994	30,000.00
22	MRS MUNI MOHONA GOWALA	BIJOY GOWALA	ST JOSEPH SCHOOL	SBI	SBIN0003835	34613885474	30,000.00
23	MRS LALITA KHALKHO	BERLIUS KHALKHO	ST JOSEPH SCHOOL	SBI	SBIN0003835	35715022479	30,000.00
24	SRI PROBIN MINJ	ADORIUS MINJ	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010515863	30,000.00
25	SRI MONTU KURMI	BULU KURMI	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010763752	30,000.00
26	MRS FILOMINA KHALKHO	SANJOY KHALKO	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010802963	30,000.00
27	MRS DIPALI NAGBANSHI	SANJOY NAGBANSHI	ST JOSEPH SCHOOL	SBI	SBIN0003835	3669768497	30,000.00
28	SRI SANJOY NAGBANSHI	NALHGAR NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010988032	30,000.00
29	MRS LAXMI MURAH	TINKU MURAH	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010961998	30,000.00
30	MRS ANISHA MURAH	RAMU MURAH	ST JOSEPH SCHOOL	IOB	IOBA0002946	#####	30,000.00
31	SRI SHAKTI KARUWA		ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010951647	30,000.00
32	MRS RITA KARUWA	ANIL KARUWA	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010451994	30,000.00
33	MRS ANITA KARUWA	BHIKHARI KARUWA	ST JOSEPH SCHOOL	UBI	UTBI0D0D316	0015010809788	30,000.00
34	MRS MIRASHU KARUWA		ST JOSEPH SCHOOL	SBI	UTBI0D0D316	32242466762	30,000.00

35	MRS RINA KARUWA	GOPAL KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010763776	30,000.00
36	MRS CHAMARI KARUWA	KALU KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010451895	30,000.00
37	MRS BANACIREE KARUWA	UDAY NADI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010451291	30,000.00
38	MRS KAJAL GORH	BISHAL GORH	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015011004702	30,000.00
39	MRS LAKHI URANG		ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010542319	30,000.00
40	MRS ASHANI KARUWA	SAHARU KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010539013	30,000.00
41	MRS AROTI BHIN NAGBANSHI	SUKHCHAND NAGBANSHI	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010745581	30,000.00
42	MRS JANAKI KARUWA	DHAN KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010851893	30,000.00
43	MRS DULUNI KARUWA	PRATAP KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010447898	30,000.00
44	SRI NIRMAL KARUWA	MASUDHAN KARUWA	ST JOSEPH SCHOOL	SBI	SBIN0003835	34443693645	30,000.00
45	MRS MUNI MURAH	RAJEN MURAH	ST JOSEPH SCHOOL	SBI	SBIN0003835	31503886075	30,000.00
46	SRI PARIMAL GOWALA	FIRON GUWALA	ST JOSEPH SCHOOL	SBI	SBIN0003835	33232411082	30,000.00
47	MRS RESHMA URANG	BUTU URANG	ST JOSEPH SCHOOL	AGVB	UTBIORRBAGB	7156010058566	30,000.00
48	MRS JAYANTI KARUWA		ST JOSEPH SCHOOL	SBI	SBIN0003835	31015701908	30,000.00
49	SRI BISHUN GOWALA	BHAGHIRATHI GOWALA	ST JOSEPH SCHOOL	SBI	SBIN0003835	36455873335	30,000.00
50	MRS PUJA KARUWA	ANIL KARUWA	ST JOSEPH SCHOOL	UBI	UTBIODOD316	0015010541824	30,000.00
51	MRS JUNALI KARUWA	SARU KARUWA	ST JOSEPH SCHOOL	SBI	SBIN0003835	32630862562	30,000.00
52	MRS PHULESWARI KARUWA	W/O MOHIM KARUWA		UBI	UTBIODOD316	0015010955485	30,000.00
53	ANITA NAGBANSHI	W/O BIJOY NAG		UBI	UTBIODOD316	0015010884396	30,000.00

54	SIMA NAGBANSHI	W/O BIJOY NAGBANSHI	UBI	UTBIODOD316	0015010586290	30,000.00
55	FULMATIYA GOWALA	W/O KRISHNA	UBI	UTBIODOD316	0015010447812	30,000.00
56	AMILA NANDO	W/O LATE RAMESH NANDO	AGVB	UTBIORRBAGB	7156010068004	30,000.00
57	SRI MANTU KURMI	S/O BULU KURMI	UBI	UTBIODOD316	0015010763752	30,000.00
58	SRI AMIT URANG	S/O KESUWAR URANG	UBI	UTBIODOD316	0015010754993	30,000.00
59	SRI ARATI ABOR	W/O ABOR NAGBANSHI	UBI	UTBIODOD316	0015010740098	30,000.00
60	SRI DURGI BIJAY	W/O TINKU NAGBANSHI	UBI	UTBIODOD316	0015010759120	30,000.00
61	DULARY KARMAKAR	LAXMAN KARMAKAR	UBI	UTBIODOD316	0015010451987	30,000.00
62	SONU MURAH	S/O SAJAN MURAH	SBI	SBIN0003835	35715022582	30,000.00
63	RIKU (NATH) GUWALA	BISUN GUWALA	SBI	SBIN0003835	31128140526	30,000.00
64	TUJA KHERUWAR	LAKHIYA	SBI	SBIN0003835	38716862289	30,000.00
65	SATHINI MURAH	W/O TINKU	UBI	UTBIODOD316	0015010759076	30,000.00
66	SONIARO GUWALA	W/O PATO GUWALA	UNION	UBIN0545040	450402011000462	30,000.00
67	ARUNA GUWALA	BHAGIROTHI	UBI	UTBIODOD316	0015010447782	30,000.00
68	RABIN KHERUWAR (BOGA)	S/O BUDHURAM KHERUWAR	AGVB	UTBIORRBAGB	7156010099624	30,000.00
69	RUPALI GUWALA	W/O PARIMAL GUWALA	SBI	SBIN0003835	35961817769	30,000.00
70	SANJAY GUWALA	C/O KULAMAN	UBI	UTBIODOD316	0015010517393	30,000.00
71	KRISHNA GUWALA	S/O PUNISING GUWALA	AGVB	UTBIORRBAGB	7156010006036	30,000.00
72	BASANTI GUWALA	BAISAKU GUWALA	UBI	UTBIODOD316	0015010323666	30,000.00
73	AMAN GUWALA	LATE BISHNU GUWALA	UBI	UTBIODOD316	0015010507219	30,000.00
Total Amount Rs.						21,90,000.00

LIST OF OIL AFFECTED PERSONS OF BAGHJAN GAON AREAS - 90 Nos.

SL NO	HEAD OF THE FAMILY	FATHER/HUSB AND	IFSC CODE	BANK	ACCOUNT	Amount to be transferred (in Rs.)
1	TIPESWAR BARUAH		UTBI0RRBAGB	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	7156010006793	30,000.00
2	GODU MORAN	PHONIDHAR MORAN	UTBI0RRBAGB	ASSAM GRAMIN BIKASH BANK, DOOMDOOMA	7156010002837	30,000.00
3	APURBA MORAN		SBIN003835	SBI, DOOMDOOMA	32487347043	30,000.00
4	SIDARTHA CHETIA		UBIN0545040	UNION BANK OF INDIA, DOOMDOOMA	450402010007217	30,000.00
5	MINTU MORAN	BOHUT MORAN	SBIN003835	SBI, DOOMDOOMA	33711844137	30,000.00
6	SATYAJIT MORAN		UTBIN0538329	UNION BANK, TINSUKIA	383202120001420	30,000.00
7	DOLEE BORUAH	KULEN BORUAH	SBIN003835	SBI, DOOMDOOMA	31838907743	30,000.00
8	MANABHA BORA	CHANDRA BORA	SBIN003835	SBI, DOOMDOOMA	35570079206	30,000.00
9	GONAMALA HAZARIKA	MONESWAR HAZARIKA	UTBIODOD316	UNITED, DOOMDOOMA	0015010515641	30,000.00
10	RITAMONI MORAN	L.T. DEBEN MORAN	UTBIOTIKG88	UNITED, TIPUK	1256010274852	30,000.00
11	MONTU MORAN	BINDESWAR MORAN	SBIN003835	SBI, DOOMDOOMA	0015010814317	30,000.00
12	SILPA NAGBONSHI	MONGLA NAGBONSHI	SBIN003835	SBI, DOOMDOOMA	0015010715546	30,000.00
13	PRIMPA GOWALA	SANJAY GOWALA	SBIN003835	SBI, DOOMDOOMA	0015010608312	30,000.00

14	MAINA NEOG	PEMOT NEOG	SBIN0003835	SBI, DOOMDOOMA	0015010320184	30,000.00
15	DIPTI NEOG	DEBESWAR NEOG	SBIN0003835	SBI, DOOMDOOMA	0015010320092	30,000.00
16	ANJANA PARBUNA	PRABUNATH KORUWA	SBIN0003835	SBI, DOOMDOOMA	0015010758864	30,000.00
17	AKONI BORUAH	DINESH BORUAH	UTBINO538329	UNION BANK OF INDIA, TINSUKIA	383202010061021	30,000.00
18	RUNJUN HAZARIKA	BISWAJIT HAZARIKA	UTBINO538329	UNION BANK OF INDIA, TINSUKIA	383202010062123	30,000.00
19	MUKTI NATH CHUTIA	DINESWAR CHUTIA	SBIN0017252	SBI, RUPAISIDING	20404229206	30,000.00
20	ARCHANA MORAN	PRANJIT MORAN	SBIN0012262	SBI, MAKUM	35145861386	30,000.00
21	RUNU BORA		SBIN0012262	SBI, MAKUM	31032765496	30,000.00
22	PANKAJ MORAN	BADON MORAN	SBIN0003835	SBI, DOOMDOOMA	35945049567	30,000.00
23	PHAGUNI URANG		SBIN00003835	SBI, DOOMDOOMA	32182913800	30,000.00
24	DEBENDRA NEOG		UTBIODOD316	UBI, DOOMDOOMA	00150115449	30,000.00
25	NOBOJYOTI MORAN		UBI0538329	UNION BANK, TINSUKIA	383202010061196	30,000.00
26	DHADANG DAHUTIA		UBI0538329	UNION BANK, TINSUKIA	383202010061036	30,000.00
27	DEEPAK MORAN		UTBIORRBAGB	AGVB, DOOMDOOMA	7156010092658	30,000.00
28	PRANJAL GOGOI		SBIN00003835	SBI, DOOMDOOMA	11288564252	30,000.00
29	SUIT NEOG	NORESWAR NEOG	UTBIN0548979	UNION BANK OF INDIA	489702010039397	30,000.00
30	HIRAKJYOTI CHUTIA		SBIN0000196	SBI, TINSUKIA	20122319804	30,000.00
31	DOLOBHA MORAN		PUNB0045100	PNB, TINSUKIA	045100170004944	30,000.00

32	GAUTHALI NEOG		UTBIORRBAGB	AGVB, DOOMDOOMA	7156010004261	30,000.00
33	AJANTA BORUAH		SBIN00003835	SBI, DOOMDOOMA	32055166216	30,000.00
34	DINESWAR CHUTIA	LEHUK CHUTIA	SBIN00003835	SBI, DOOMDOOMA	11288565993	30,000.00
35	MALAK HAZARIKA	TORBOR HAZARIKA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010062170	30,000.00
36	VELEC CHETIA	TUNESWAR CHETIA	UTBIODOD316	UNITED, DOOMDOOMA	0015010533768	30,000.00
37	JOYAMAY MORAN	BIJOY MORAN	UBIN0538329	UNION, TINSUKIA	383202010061037	30,000.00
38	APURBA HAZARIKA	PANDIT HAZARIKA	SBIN0003835	SBI, DOOMDOOMA	36697678599	30,000.00
39	NIJARA MORAN	LETUK MORAN	UBIN0538329	UNION, TINSUKIA	383202010061039	30,000.00
40	AMAL PRABHA BORUAH	SURESH BORUAH	SBIN0003835	SBI, DOOMDOOMA	32217143414	30,000.00
41	MEJE CHETIA	SOSHI CHETIA	SBIN0003835	SBI, DOOMDOOMA	7156010032656	30,000.00
42	JAYA MORAN	DOUL MORAN	UBIN0538329	UBI, DOOMDOOMA	383202120001474	30,000.00
43	MINESWARI DOHUTIA	PABITRA DOHUTIA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010004463	30,000.00
44	ILABATI HAZARIKA	LETUK HAZARIKA	UTBIODOD316	UBI,DOOMDOO MA	0015010485220	30,000.00
45	BIHUTI HAZARIKA	KHIRESWAR HAZARIKA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010045641	30,000.00
46	RUNJUN GOGOI	KULSING GOGOI	SBIN0003835	SBI, DOOMDOOMA	35876213548	30,000.00
47	DOLIN HAZARIKA	L.T. RUPEN HAZARIKA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010003856	30,000.00
48	NALI HAZARIKA	SABE HAZARIKA	SBIN0003835	SBI, DOOMDOOMA	36502157423	30,000.00
49	DHONESWAR MORAN	PENU MORAN	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010006345	30,000.00

50	THANASWARI MORAN	HORENDRA MORAN	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010064567	30,000.00
51	AROTI CHOWRAK	BAPUKON CHAOIWRAK	UTBI0MKM344	UNITED, MAKUM	0019010114808	30,000.00
52	PANIRAM BORA	RAJESWAR BORA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010103534	30,000.00
53	PRANITA HAZARIKA	PIJIK HAZARIKA	SBIN0003835	SBI, DOOMDOOMA	32182913719	30,000.00
54	PRAKASH HAZARIKA	PANDIT HAZARIKA	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010018267	30,000.00
55	UJALATA CHUTIA HAZARIKA	NABAJIT HAZARIKA	UBIN0538329	UNION, TINSUKIA	383202130001430	30,000.00
56	AKHESWAR CHETIA	PULIN CHETIA	SBIN0003835	SBI, DOOMDOOMA	35283405253	Double_already included in prev. list Sl. 177 & 477 (Same person but Different A/C No.)
57	NAMITA MORAN	GOGON MORAN	SBIN0003835	SBI, DOOMDOOMA	35571068492	30,000.00
58	ANJALI URANG	BHIU URANG	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010018850	30,000.00
59	LAKHI PATOR	LAKHIT PATOR	BDBL0001506	BANDHAN, TINSUKIA	50170019240090	30,000.00
60	MANGLI URANG	PROBAN URANG	UTBIODOD316	UNITED, DOOMDOOMA	0015010885065	30,000.00
61	DILBAR KOIRI	SIWAPRASAD KOIRI	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010069128	30,000.00
62	RAJU KOIRY	DILBOR KOIRI	UTBIODOD316	UBI, DOOMDOOMA	0015010761406	30,000.00
63	JAMUNA K SAHANI	RABINDRA SAHANI	BKIDODO05062	SBI, DULIAJAN	506210110001112	30,000.00
64	KIRAN KR. BAILUNG	DINA BAILUNG	ANDB0001811	ANDHARA BANK, TINSUKIA	181110100012914	30,000.00
65	GITANJALI PHUKAN	PADMADHAR PHUKAN	SBIN0003835	SBI, DOOMDOOMA	31546800697	30,000.00

66	KANAK PHUKAN	PADMADHAR PHUKAN	UBIN0538329	UNION, TINSUKIA	383202010059222	30,000.00
67	SIJUEE SAHANI	BABULAL SAHANI	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010004394	30,000.00
68	MONIKHA GOGOI	PRASANTA GOGOI	IBKL0001122	IDBI, TINSUKIA	112210400008103 2	30,000.00
69	GOLAP KOIRY	LOKHIYA KOIRY	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010005161	30,000.00
70	BHABEN BARUAH	ANDESWAR BARUAH	CBIN0281286	CBI, DOOMDOOMA	3664310041	30,000.00
71	TITU CHETIA	ANIL CHETIA	IBKL0001122	IDBI, TINSUKIA	112210400007395 4	30,000.00
72	RATUL NEOG	KANDESWAR NEOG	ALLA0210714	ALLAHABAD, TINSUKIA	5023858274	30,000.00
73	NIRU GOGOI	SHISURAM GOGOI	SBIN0003835	SBI, DOOMDOOMA	35653053835	30,000.00
74	CHUNILAL KOIRY	SAINA KOIRY	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010024091	30,000.00
75	USHA DEY GOGOI	BHIMKANTA GOGOI	UTBIOTIKG88	UBI, TIPIUK	1256010212328	30,000.00
76	HEMOLOTA DAS GOGOI	PROFULLA DAS	UTBIOBRNG84	UBI, TINSUKIA	1224010179973	30,000.00
77	BUDHNI KHERUWAR	MATILAL KHERUWAR	UTBIODOD316	UBI, DOOMDOOMA	0015010454452	30,000.00
78	SANDANA GOGOI	ANIL GOGOI	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010092764	30,000.00
79	PRODIP PHUKAN BAILUNG	SIVA BAILUNG	UBIN0538329	UNION, TINSUKIA	383202010059788	30,000.00
80	BIREN GOOGI/MITU GOGOI	ANIL GOGOI	UCBA0000546	UCO, TINSUKIA	05460110029732	30,000.00
81	PROMITA NEOG	ROMEN NEOG	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010084242	30,000.00
82	MAMONI BAILUNG	LACHIT BAILUNG	SBIN0003835	SBI, DOOMDOOMA	20333131481	30,000.00
83	ANITA MORAN	PILESWAR MORAN	UBIN0538329	UNION, DOOMDOOMA	383202120001462	30,000.00

84	NIMANTA BORAH	BHARAT BORAH	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010006994	30,000.00
85	RIPUJIT MORAN	MODON MORAN	SBIN0003835	SBI, DOOMDOOMA	35201946755	30,000.00
86	DHORMESWAR CHETIA		UBIN0545040	UNION BANK	00151010111055	30,000.00
87	LABHANYA MORAN		BDBL0001506	BANDHAN, TINSUKIA	50180007234654	30,000.00
88	KARABI S BAILUNG	BISWAJIT BAILUNG	SBIN0003835	SBI, DOOMDOOMA	31083190946	30,000.00
89	MOHESH GHATOWAR	SUNU GHATOWAR	UTBIORRBAGB	AGVB, DOOMDOOMA	7158010006895	30,000.00
90	MANJIT BARUA	NUMAL BORUAH	UTBIORRBAGB	AGVB, DOOMDOOMA	7156010000792	30,000.00
					Rs.	26,70,000.00

DETAILS OF ACCOUNT NUMBERS OF ADDITIONAL LIST AT BAGHIAN GAON 21N.os.

SL NO	HEAD OF THE FAMILY	FATHER/HUSBAND	IFSC CODE	BANK	ACCOUNT	Amount to be transferred (in Rs.)
1	DIPANKAR MORAN	HOREN MORAN	SBIN0003835	SBI, DOOMDOOMA	35201946744	30,000.00
2	POMPI MORAN GOGOI		UTBIODOD316	UNITED BANK OF INDIA	0015010966832	30,000.00
3	RUPA MORAN (TRIDIP)		UTBIODOD316	UNITED BANK OF INDIA	0015010452694	30,000.00
4	HEMASHREE MORAN	HUNESWAR CHUTIA	SBIN0003835	SBI, DOOMDOOMA	20333127215	30,000.00
5	SALUKI MORAN	LT. ADHAY MORAN	UTBIODOD316	UNITED BANK OF INDIA	0015010321303	30,000.00
6	MAINU HAZARIKA	KALYANJYOTI	UTBIORRBAGB	AGVB	7156010092223	30,000.00
7	MAGHETI NEOG		UTBIORRBAGB	AGVB	7156010019327	30,000.00
8	NIPEN GOGOI		UCBA0000546	UCO BANK, TSK	05463211002697	30,000.00
9	ATENDRA DAS	SUREN DAS	UTBIODOD316	UNITED BANK OF INDIA	0015010493284	30,000.00
10	RAJESH DAS	SUREN DAS	UTBIORRBAGB	AGVB	7156010108188	30,000.00
11	PAMESWARI NEOG		UTBIORRBAGB	AGVB	7156010004232	30,000.00
12	AMIR URANG				A/F	
13	CHANDONA RAI		ALLA0210463	ALLAHABAD, TSK	59114235788	30,000.00
14	BINA BORAH		SBIN0003835	SBI, DOOMDOOMA	31126573821	30,000.00
15	BIPUL MORAN	RATHESWAR MORAN	UTBIORRBAGB	AGVB	111964	30,000.00
16	HIRENDRA GOGOI	NAREN GOGOI	SBIN0003835	SBI, DOOMDOOMA	38353123021	30,000.00
17	MINESWARI MORAN	TAKAO MORAN	UTBIORRBAGB	AGVB	7156010000316	30,000.00
18	NAME HAZARIKA	LABHESWAR HAZARIKA	UTBIORRBAGB	AGVB	7156010095859	30,000.00

19	GOJEN BARUAH		SBIN0003835	SBI, DOOMDOOMA	31546800766	30,000.00
20	PULAK BORAH	BALIN BORAH	SBIN0003835	SBI, DOOMDOOMA	34618411667	30,000.00
21	RANJU HAZARIKA	DEBA HAZARIKA	SBIN0003835	SBI, DOOMDOOMA	34790166417	30,000.00
					Rs.	6,00,000.00

Dighaitarang Gaon Relief Beneficiary (PHE Centre Quarters) 215 Nos.

Sl. No.	Head of Family	Father/ Husband	Bank Name	IFSC code	Account No	Amount to be transferred (in Rs.)
1	BASANTI DAS	SOMRAJ DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010035468	30,000.00
2	SHIBCHARAN DAS	HORI DAS	UNION BANK OF INDIA	UBIN0545040	450402130000031	30,000.00
3	ADARI DAS	SUNIL DAS	UNION BANK OF INDIA	UBIN0545040	45040213000653	30,000.00
4	BINA DAS	SHUDARSHAN DAS	UNION BANK OF INDIA	UBIN0545040	450402011006378	30,000.00
5	SANJIT DAS	PURNA DAS	UNITED BANK OF INDIA	UTBI0D0D316	00150105295525	30,000.00
6	JOMUNA DAS	BIREN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010548045	30,000.00
7	JITU DAS	SHIBU DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010073112	30,000.00
8	BIBEKA NANDA DAS	BINUD DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010424233	30,000.00
9	NEPALI DAS	FALAN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010548274	30,000.00
10	ANITA DAS	BISU DAS	STATE BANK OF INDIA	SBIN0003835	3245074967	30,000.00
11	DIPALI DAS	RATHIKANTA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010705752	30,000.00
12	BOBITA DAS	SARUP DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010610537	30,000.00
13	SUSHMA DAS	RAMCHADRA DAS	UNION BANK OF INDIA	UBIN0545040	450402130000652	30,000.00
14	REENA DAS	SUDANSHU	UNITED BANK OF INDIA	UTBI0D0D316	0015010548137	30,000.00
15	NIPU DAS	PARIMAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010638197	30,000.00
16	ANJANA CHOUDHURY	PIJUSH CHOUDARY	UNITED BANK OF INDIA	UTBI0D0D316	0015010548991	30,000.00
17	SUNITA CHOUDHURY	BAPON CHOUDARY	STATE BANK OF INDIA	SBIN0003835	36009571901	30,000.00
18	REKHARANI DAS	HORIMON DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010306911	30,000.00

19	JAHARLAL DAS	RADHARAN DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71560100034052	30,000.00
20	KUMOTI DAS	GOUTAM DAS	STATE BANK OF INDIA	SBIN0003835	37009305636	30,000.00
21	PROMOD DAS	PURNO DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010525855	30,000.00
22	SUMITRA DAS	HORICHARAN DAS	STATE BANK OF INDIA	SBIN0003835	35907392704	30,000.00
23	JOYMOTI DAS	BISWAJIT DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010088576	30,000.00
24	RAJU CHOKROBORTI	SUKMAR CHAKRABOTI	STATE BANK OF INDIA	SBIN0003835	35961817714	30,000.00
25	MONU DAS	PROJENDRA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010096317	30,000.00
26	SANDHYARANI DAS	RANJIT DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010047685	30,000.00
27	MONMILON DAS	SIMANTA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	715610088637	30,000.00
28	SAILLEN DAS	SAHADEV DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71560100967551	30,000.00
29	RATIBALA DAS	RABI DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010479806	30,000.00
30	BANDONA DAS	HOROLAL	UNITED BANK OF INDIA	UTBI0D0D316	001501048168	30,000.00
31	DHARMA DAS	SOHODEV DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010094814	30,000.00
32	PINKI KISHAN	AJAY KISHAN	UNITED BANK OF INDIA	UTBI0D0D316	0015010784030	30,000.00
33	MONORANJAN DAS	KARTIK DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010320177	30,000.00
34	BISHOKA DAS	PREMAKANTO DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010711395	30,000.00
35	KITISH DAS	SAHDEV DAS	HDFC BANK	HDFC0002965	0015010818261	30,000.00
36	JOYDHON DAS	PRODHAN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010469630	30,000.00
37	ALPANA BISWAS DAS	AJONTA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010985321	30,000.00
38	PARUL DAS	NARAYAN DAS	UNITED BANK OF INDIA	UTBI0D0D316	005010507554	30,000.00

39	RITA DAS	GUPAL DAS	STATE BANK OF INDIA	SBIN0003835	30581429829	30,000.00
40	BOSUMOTI DAS	UTTAM DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010548397	30,000.00
41	BHAIRABI DAS	PRODEEP DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010041539	30,000.00
42	SIRANJIT DAS	SUKUMAR DAS	UNITED BANK OF INDIA	UTBIIKG88	1256010488303	30,000.00
43	BINA DAS	RANJIT DAS	STATE BANK OF INDIA	SBIN0003835	31845891960	30,000.00
44	JAYENTI DAS	HIROLAL DAS	STATE BANK OF INDIA	SBIN0003835	34677073283	30,000.00
45	NITYAMONI DAS	DIPEN DAS	STATE BANK OF INDIA	SBIN0003835	31302557276	30,000.00
46	PURNA DAS	RAJENDRA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	715601010005502	30,000.00
47	UMA DAS	ANODO DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71560100088600	30,000.00
48	RINA DAS	SATISH DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010590549	30,000.00
49	JARANA DAS	KHITISH DAS	UNITED BANK OF INDIA	UTRI0D0D316	0015010548106	30,000.00
50	MOHANTA DAS	BOSONTA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010287180	30,000.00
51	MADHURI DAS	MONTUSH DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010846004	30,000.00
52	SANCHITA DAS	SUPEN DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71560109987	30,000.00
53	SUCHITRA DAS	JUGENDRA DAS	UNITED BANK OF INDIA	UTRI0D0D316	00150150548922	30,000.00
54	NOMITA DAS	JUGENDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010877763	30,000.00
55	ANU DAS	A.MOL.DAS	UNITED BANK OF INDIA	UTBI0D0D316	00150545877	30,000.00
56	GUPAL DAS	RATUN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010469692	30,000.00
57	PHULAN DAS	DILIP DAS	STATE BANK OF INDIA	SBIN0003835	34378250051	30,000.00
58	RABIKA PRASAD	DINANATH PRASAD	UNITED BANK OF INDIA	UTBI0D0D316	0015010574389	30,000.00

59	HORIPADA DAS	NANDALAL DAS	STATE BANK OF INDIA	SBIN0003835	34711198229	30,000.00
60	FALGUNI DAS	PRECHAND DAS	STATE BANK OF INDIA		383202130001373	
60	SUKESH DAS	NITYALAL DAS	STATE BANK OF INDIA	SBIN0003835	20198088810	30,000.00
61	PREMECHAND DAS	GUBINDO DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010469685	30,000.00
62	JOYA DAS	SAJLESH DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010987974	30,000.00
63	KANAKA DAS	DHIREN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010320160	30,000.00
64	SARASWATI DAS	MOHONLAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	00150105554459	30,000.00
65	BIKASH DAS	NITYALAL DAS	UNION BANK OF INDIA	UBIN0538329	383202010061494	30,000.00
66	NIKESH DAS	NITYALAL DAS	STATE BANK OF INDIA	SBIN0003835	30345084555	30,000.00
67	SONCHITA DAS	PRODIP DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010697040	30,000.00
68	TULSHI DAS	PREMCHAND DAS	UNITED BANK OF INDIA	UTBI0D0D316	001501061384	30,000.00
69	MONTU DAS	RANGAMOHAN DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010030977	30,000.00
70	JOYA DAS	CHONDON DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010508421	30,000.00
71	RITON BISWASH DAS	MONILAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010865845	30,000.00
72	JUNU DAS	NORENDRA DAS	STATE BANK OF INDIA	SBIN0003835	36855121834	30,000.00
73	RASHUBALA BISWAS	BIMOL BISWAS	UNITED BANK OF INDIA	UTBI0D0D316	0015501045144	30,000.00
74	HARALAL DAS	SVAMLAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010497084	30,000.00
75	GITA THAKUR	JOILAL THAKUR	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010006406	30,000.00
76	RUPTORA PROSAD	RAMSARUP PROSAD	UNITED BANK OF INDIA	UTBI0D0D316	0015010574396	30,000.00
77	PUSHPO DAS	PURNA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010540117	30,000.00

78	HORIPOD DAS	ARJUN DAS	STATE BANK OF INDIA	SBIN0003835	36811998715	30,000.00
79	SUNIL DAS	CHONDO KUMAR DAS	UNITED BANK OF INDIA	UTBI000D316	0015010463225	30,000.00
80	PHULANBALA DAS	ARJUN DAS	UNITED BANK OF INDIA	UTBI000D316	00150105084552	30,000.00
81	ANITA SAHANI DAS	BIJEN DAS	UNION BANK OF INDIA	UBIN0545040	450402130000650	30,000.00
82	KISHON SAHANI	DEWNARAYON	STATE BANK OF INDIA	SBIN0003835	33883495662	30,000.00
83	PROMOD DAS	KAMINI DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71560100027955	30,000.00
84	LAKHMI SAHANI	TARANATH SAHANI	UNITED BANK OF INDIA	UTBI000D316	0015010542179	30,000.00
85	PROMILA BISWAS	SUNAMON BISWAS	UNITED BANK OF INDIA	UTBI000D316	0015010451567	30,000.00
86	NIRU GOHAIN	BIRBOR GOHAIN	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010005095	30,000.00
87	RUPALI DAS	KAMAL DAS	STATE BANK OF INDIA	SBIN0003835	3398235593	30,000.00
88	BANI DAS	BINUOD DAS	UNITED BANK OF INDIA	UTBI000D316	0015010878630	30,000.00
89	RANI DAS	SUNIL DAS	UNITED BANK OF INDIA	UTBI000D316	0015010208116	30,000.00
90	RASHUBALA DAS	NIRONJON DAS	UNION BANK OF INDIA	UBIN0545040	45040213000249	30,000.00
91	HEMOLA DAS	RANJON DAS	STATE BANK OF INDIA	SBIN0003834	34352963184	30,000.00
92	SAROTTI DAS	SAPON DAS	STATE BANK OF INDIA	SBIN0003835	33232411151	30,000.00
93	RABINDRA DAS	DASKAT DAS	UNITED BANK OF INDIA	UTBI000D316	0015010511704	30,000.00
94	SUNITA DAS	GOPAL DAS	UNITED BANK OF INDIA	UTBI000D316	0015010574358	30,000.00
95	RAKHAL DAS	AMORCHAND DAS	UNION BANK OF INDIA	UBIN0545040	450402011004210	30,000.00
96	SAJIT SARKAR	RAJKUMAR SARKAR	ALHABAD BANK	ALLA0211124	5916608307211660	30,000.00
97	BIPIN DAS	DINESH DAS	UNION BANK OF INDIA	UBIN0545040	383202010052014	30,000.00

98	KALPONA DAS	RASDARAJ DAS	STATE BANK OF INDIA	SBIN0003835	37009305670	30,000.00
99	JOYDHONI DAS	ROBI DAS	UNITED BANK OF INDIA	UTBI000D316	0015010558648	30,000.00
100	RUPA DAS	RIPON DAS	UNION BANK OF INDIA	UBIN0545040	45102010008927	30,000.00
101	ROSHMI DAS	DULAL DAS	STATE BANK OF INDIA	SBIN0003835	30741391995	30,000.00
102	FULKUMARI DAS	SIKANTO DAS	UNITED BANK OF INDIA	UTBI000D316	00150103220153	30,000.00
103	SUJIT DAS	SUSANTO DAS	STATE BANK OF INDIA	SBIN0003835	35204420470	30,000.00
104	LALITA DAS	SUSANTO DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010032629	30,000.00
105	MOLINA DAS	BASI DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010073103	30,000.00
106	SUKUMAR DAS	NOBODIP DAS	UNITED BANK OF INDIA	UTBI000D316	0015010320054	30,000.00
107	SUBOBHASONI DAS	SAMU DAS	OVERSASE BANK OF INDIA		294601000003125	
107	PANKAJ DAS	NARESH DAS	STATE BANK OF INDIA	SBIN0003835	31485635631	30,000.00
108	SUJATA DAS	DEBU DAS	UNITED BANK OF INDIA	UTBI000D316	0015010987967	30,000.00
109	TARULATA DAS	NIBARAN DAS	UNITED BANK OF INDIA	UTBI000D316	000150105481511	30,000.00
110	SULTANA DAS	ABHIMONYA DAS			A/F	
110	BIJEN DAS	SAHDEV DAS	UNION BANK OF INDIA	UBIN0545040	450402011002853	30,000.00
111	BABUL URANG	MANGRA URANG	UNION BANK OF INDIA	UBIN0545040	450402010006189	30,000.00
112	CHANAKA DAS	KARUNA DAS	UNITED BANK OF INDIA	UTBI000D316	0015010553070	30,000.00
113	RINKI DAS	RAJIB DAS	UNITED BANK OF INDIA	UTBI000D316	0015010942928	30,000.00
114	KHOKAN DAS	KARTIK DAS	STATE BANK OF INDIA	SBIN0003835	31811648144	30,000.00
115	MAKHON DAS	KARTIK DAS	STATE BANK OF INDIA	SBIN0003835	36196786626	30,000.00

116	JAIMATI DAS	MONI DAS	UNITED BANK OF INDIA	UTBI000D316	0015010434492	30,000.00
117	USHARANI DAS	BIRESOR DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010098271	30,000.00
118	SUMITRA CHOKRABORTY	SUKUMAR CHOKRABORTY	UNITED BANK OF INDIA	UTBI000D316	0015010320023	30,000.00
119	ANONTA DAS	BOSONTO DAS	STATE BANK OF INDIA	SBIN0003835	20277053956	30,000.00
120	PRODIP DAS	PURNA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010004868	30,000.00
121	MINOTI DAS	NIKHIL DAS	UNITED BANK OF INDIA	UTBI000D316	0015010720694	30,000.00
122	ANJOLI DAS	NAGEN DAS	UNITED BANK OF INDIA	UTBI000D316	0015010701570	30,000.00
123	NITYALAL DAS	RADHACHARAN DAS	STATE BANK OF INDIA	SBIN0003835	20393169135	30,000.00
124	BASONA DAS	DURGU DAS	STATE BANK OF INDIA	SBIN0003835	31128292602	30,000.00
125	MOUSUMI DAS	SAJOL DAS	UNITED BANK OF INDIA	UTBI000D316	0015010870313	30,000.00
126	BIPLOB NAMASUDRA	HORENDRA NOMOSHUDRA	UNION BANK OF INDIA	UTBN054040	450402011006058	30,000.00
127	MONI DAS	RAJESH DAS	STATE BANK OF INDIA	SBIN0003835	34738250095	30,000.00
128	SANDYA DAS	KAMOL DAS	UNITED BANK OF INDIA	UTBI000D316	0015010544900	30,000.00
129	SIBU DAS	GOUCHAND DAS	UNITED BANK OF INDIA	UTBI000D316	0015010452946	30,000.00
130	SIRU BISWAS	HOREKISHINA BISWAS	UNITED BANK OF INDIA	UTBI000D316	0015010451690	30,000.00
131	RENU BISWAS	THAKURDON BISWAS	STATE BANK OF INDIA	SBIN0003835	34352963231	30,000.00
132	SARASATI DAS	SAHDEV DAS	UNION BANK OF INDIA	UBIN0545040	450402010007073	30,000.00
133	DHANAWATI DEVI	NAND KUMAR BIN	STATE BANK OF INDIA	SBIN0003835	37372806864	30,000.00
134	MONTU DAS	BOIKUNTHA DAS	UNITED BANK OF INDIA	UTBI000D316	0015010909587	30,000.00
135	KOLPONA DAS	KONGSHO DAS	UNITED BANK OF INDIA	UTBI000D316	0015010817998	30,000.00

136	TRISHNA DAS	KALI DAS	STATE BANK OF INDIA	SBIN003835	310685281023	30,000.00
137	ANIMA DAS	SANJAY DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010091507	30,000.00
138	PUNOM GUWALA DAS	BADOL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010932585	30,000.00
139	SANGITA THAKUR	RAMBOJON	UNITED BANK OF INDIA	UTBI0D0D316	0015010194082	30,000.00
140	DILARANI DAS	BIREN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010548915	30,000.00
141	JUSHNA BISWASH	DURGA BISWASH	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	715601009491	30,000.00
142	RANJIT PROSAD	RAMSORUP PROSAD	STATE BANK OF INDIA	SBIN0003835	20130528759	30,000.00
143	USHA SAHANI	KAMESSOR SAHANI	UNITED BANK OF INDIA	UTBI0D0D316	0015010543907	30,000.00
144	SUMITRA NOMOSUDRA	NIBARON NOMOSUDRA	UNITED BANK OF INDIA	UTBI0D0D316	00155010507547	30,000.00
145	MAYA BISWAS	LILU BISWAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010451529	30,000.00
146	SONTUSH DAS	VAKTA DAS	STATE BANK OF INDIA	SBIN0003835	34864446303	30,000.00
147	KUHIMA MORAN DAS	BIJU DAS	STATE BANK OF INDIA	SBIN0003835	38234903551	30,000.00
148	MILON DAS	SOMOR CHONKA BOTI DAS	STATE BANK OF INDIA	SBIN0003835	355185176643	30,000.00
149	DHIREN DAS	DEBENDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010113432	30,000.00
150	SABITA NOMOSUDRA	DILIP NOMOSUDRA	UNITED BANK OF INDIA	UTBI0D0D316	0015010507325	30,000.00
151	MAMUN DAS	AMRIT SEN	APEX BANK	HDFCOCACABL	451042010005893	30,000.00
152	MAYAKANI DAS	SRIKANTA DAS	STATE BANK OF INDIA	SBIN0003835	33083393760	30,000.00
153	GOURANGO DAS	ROMESH DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010452076	30,000.00
154	MITHUN DAS	SUDARSHAN DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7155010004049	30,000.00
155	JOSHUDA NOMOSUDNA	HARENDRA NOMOSUDNA	UNITED BANK OF INDIA	UTBI0D0D316	0015010452038	30,000.00

156	HIRONBALA DAS	GOJENDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	00150105509459	30,000.00
157	KANANBALA DAS	GOJENDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010709309	30,000.00
158	RANI DAS	TOPON DAS	UNION BANK OF INDIA	UBIN0545040	450402130000640	30,000.00
159	JAYENTI DAS	RAIDHON DAS	STATE BANK OF INDIA	SBIN0003835	34443693736	30,000.00
160	KIRON DAS	PREMDHON DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010501217	30,000.00
161	BHOKTA DAS	TORANI DAS	ASSAM GRAMIN VIKASH BANK	UTBI0RRBAGB	7156010005610	30,000.00
162	SARALABALA DAS	BHUBONJOY DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010478366	30,000.00
163	RINA DAS	LEMBUDHAR DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010444534	30,000.00
164	RADHACHARAN DAS	BARAT DAS	STATE BANK OF INDIA	SBIN0003835	33883495764	30,000.00
165	GITA MAIAKAR	RAKESH DAS	STATE BANK OF INDIA	SBIN0003835	31127682637	30,000.00
166	AMBIKA DAS	AJOY DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010876001	30,000.00
167	JOSHUDARANI SEN	ASHOK SEN	ASSAM GRAMIN VIKASH BANK	UTBI0RRBAGB	7156010009973	30,000.00
168	RAJKUMAR SARKAR	SIBCHARAN SARKAR	UNITED BANK OF INDIA	UTBI0D0D316	0015010319911	30,000.00
169	TARULATA DAS	MITUN DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010610476	30,000.00
170	PUSHPANJOLI DAS	SIBOK DAS	STATE BANK OF INDIA	SBIN0003835	32630862528	30,000.00
171	NOBIN DAS	NARAYON DAS	STATE BANK OF INDIA	SBIN0003835	32485124335	30,000.00
172	MONI DAS	INDROJIT DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010560047	30,000.00
173	ASHOKA BISWASH	RAMU BISWASH	UNITED BANK OF INDIA	UTBI0D0D316	0015010451307	30,000.00
174	DILIP DAS	HARALAL DAS	ALHABAD BANK	ALLA0213482	50385210927	30,000.00
175	BISWAJIT SARKAR	JAIKUMAR SARKAR	STATE BANK OF INDIA	SBIN0007041	6546598028	30,000.00

176	PINTU DAS	HORI DAS	ASSAM GRAMIN VIKASH BANK	UTBIORREAGB	7156010030126	30,000.00
177	SAKI DAS	DEBU DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010574419	30,000.00
178	NAROD DAS	BAROT DAS	UNION BANK OF INDIA	UBIN0545040	450402010007232	30,000.00
179	PUROBI DAS	SANJAN DAS	STATE BANK OF INDIA	SBIN0003835	35961817703	30,000.00
180	SAJIB DAS	NITAI DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010542135	30,000.00
181	SAMENDRA DAS	SOCHINDRA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	71555010003607	30,000.00
182	RIYA DAS	BIPUL DAS	STATE BANK OF INDIA	SBIN0003835	32066033430	30,000.00
183	BITTU DAS	SHAMBU DAS	STATE BANK OF INDIA	SBIN0017252	33891130382	30,000.00
184	MITALI DAS	BIPLOB DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010068549	30,000.00
185	DEBU SEN	ASHOK SEN	STATE BANK OF INDIA	SBIN0003835	20130529446	30,000.00
186	BIJAY DAS	AGNI DAS	UNION BANK OF INDIA	UBIN0545040	451842818885816	30,000.00
187	JHARNA BISWAS	JOYMON BISWAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010718752	30,000.00
188	DIPAK DAS	HORALAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010701204	30,000.00
189	NIRANJAN DAS	JAHARLAL DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010384117	30,000.00
190	BRAJEN DAS	SUKUMAR DAS	STATE BANK OF INDIA	SBIN0003835	3461885496	30,000.00
191	SARASWATI DAS	PARES DAS	STATE BANK OF INDIA	SBIN0003835	319063929553	30,000.00
192	PROMILA DAS	ANIDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010508476	30,000.00
193	SULJA KISHAN	BANUWA KISHAN	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010093532	30,000.00
194	ANITA DAS	SANJAY DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010549103	30,000.00
195	ABHIJIT DAS	L.T. RANJIT DAS	STATE BANK OF INDIA	SBIN0003835	33251223108	30,000.00

196	SIBANI DAS	BIKI DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010988148	30,000.00
197	SANKAR DAS	NITAI DAS	STATE BANK OF INDIA	SBIN0003835	321466021955	30,000.00
198	PRIYANKA DAS	ARUP DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010979962	30,000.00
199	MAHANANDA MORAN	PUNESWAR MORA	UCO	UCBA0000546	05460110027820	30,000.00
200	SUMOTI DEY	ROBINDRA SARKAR	UNITED BANK OF INDIA	UTBI0D0D316	0015010991100	30,000.00
201	NIRMALA DAS	SACHINDRA SARKAR	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010065681	30,000.00
202	BIKRAM NOMOSHUDRA	HORENDRA NOMOSHUDRA	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010105859	30,000.00
203	LITAN DAS	SUDHANSHON DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010006767	30,000.00
204	BIJAY DAS	BIKRAM DAS	STATE BANK OF INDIA	SBIN0003835	31349402705	30,000.00
205	INDRALAI DAS	TARUNI DAS			20023681369	
205	ALPONA DAS	BIKRAM DAS	STATE BANK OF INDIA	SBIN0003835	32031118089	30,000.00
206	SHIBU DAS	NITAI DAS	UNION BANK OF INDIA	UBIN0545040	450402011003633	30,000.00
207	JULLI BISWAS DAS	RAJIV DAS	STATE BANK OF INDIA	SBIN0003835	38948072841	30,000.00
208	KHITENDRA DAS	DINESH DAS	UNION BANK OF INDIA	UBIN0538329	383202010058779	30,000.00
209	AROTI DAS	LALIT DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010001748	30,000.00
210	NIMESH DAS	NARENDRA DAS	ASSAM GRAMIN VIKASH BANK	UTBIORRBAGB	7156010006858	30,000.00
211	SARASWATI DAS	SATYENDRA DAS	UNITED BANK OF INDIA	UTBI0D0D316	0015010478205	30,000.00
				Total Amount Rs.=		63,30,000.00

APPENDIX H

LIST OF OIL AFFECTED PERSONS OF NATUN ROA GORA / GOTTONG GAON ARES

SL. NO	NAME OF BENEFICIARY	GUARDIAN NAME	VILLAGE	A/C NO.	IFSC CODE	to be transferred (in Rs.)
1	SMT NAMITA HAZARIKA	W/O-SRI ANUPAM HAZARIKA	NATUN RONGAGORA GAON	1224010213264	UTBI0BRNG84	25,000.00
2	SMT JINTIMONI HAZARIKA	W/O-SRI LUKNATH HAZARIKA	NATUN RONGAGORA GAON	7154010114868	UTBI0RRBAGB	25,000.00
3	SRI PRATIK CH. BORAH	S/O-LT. MOHAN MORAN	NATUN RONGAGORA GAON	11789920869	SBIN0007385	25,000.00
4	SRI MITUL BORPATRA GOHAIN	S/O-SRI PADMESWAR BORPATRAGOHAIN	NATUN RONGAGORA GAON	383202010062212	UBIN0538329	25,000.00
5	SRI GOKUL BORAH	S/O-PRATIK CH. BORAH	NATUN RONGAGORA GAON	11789901483	SBIN0007385	25,000.00
6	SMT MONALISHA BORGHAIN	W/O-SRI TARUN BORGHAIN	NATUN RONGAGORA GAON	50485604258	ALLA0210463	25,000.00
7	SRI APIT BORGHAIN	S/O-SRI RANYAI BORGHAIN	NATUN RONGAGORA GAON	11789902737	SBIN0007385	25,000.00
8	SRI LUKESWAR GOGOI	S/O-LT. JAGAT GOGOI	NATUN RONGAGORA GAON	1224010214216	UTBI0BRNG84	25,000.00
9	SRI SUKHEN GOGOI	S/O-SRI HARESWAR GOGOI	NATUN RONGAGORA GAON	73702250006905	SYNB0007370	25,000.00

10	SMT DIPALI HAZARIKA	D/O-LT. ATUL HAZARIKA	NATUN RONGAGORA GAON	11789920927	SBIN0007385	25,000.00
11	SMT SWARLATA HAZARIKA	W/O-DHIRESWAR HAZARIKA	NATUN RONGAGORA GAON	1224010181327	UTBI0BRNG84	25,000.00
12	SRI PRABHAT MORAN	S/O-DONDIRHAR MORAN	NATUN RONGAGORA GAON	11789901846	SBIN0007385	25,000.00
13	SRI RAHESWAR BORPATRA	S/O-LT. MINADHAR BORPATRA	NATUN RONGAGORA GAON	11789899122	SBIN0007385	25,000.00
14	SRI MOHAN DUTTA	S/O-LT. BIRESWAR DUTTA	NATUN RONGAGORA GAON	30764695863	SBIN0007385	25,000.00
15	SRI JYOTI BORUAH	S/O-SRI PARASURAM BARUAH	NATUN RONGAGORA GAON	33587800804	SBIN0007385	25,000.00
16	SRI MONTU BORGHAIN	S/O-SRI TULUK BORGHAIN	NATUN RONGAGORA GAON	7155010072007	UTBI0RRBAGB	25,000.00
17	SRI PARISH GOHAIN	S/O-SRI AMAL GOAHIN	NATUN RONGAGORA GAON	50402873513	ALLA0213482	25,000.00
18	SRI DIP BORGHAIN	S/O-SRI BHUPEN BORGHAIN	NATUN RONGAGORA GAON	31847801281	SBIN0007385	25,000.00
19	SRI BHUPEN BORGHAIN	S/O-LT. MOHENDRA BORGHAIN	NATUN RONGAGORA GAON	11789903582	SBIN0007385	25,000.00
20	SRI BIKASH BORGHAIN	S/O-SRI BHUPEN BORGHAIN	NATUN RONGAGORA GAON	31847801281	SBIN0007385	25,000.00

21	SRI RITUPAN BORGHAIN	S/O-SRI SEN BORGHAIN	NATUN RONGAGORA GAON	39199362512	SBIN0007385	25,000.00
22	SMT RINA GOHAIN DUTTA	W/O- TARIEN DUTTA	NATUN RONGAGORA GAON	35244340676	SBIN0007385	25,000.00
23	SRI NAKUL GOHAIN	S/O-SRI AMAL GOAHIN	NATUN RONGAGORA GAON	50404081582	ALLA0213482	25,000.00
24	SRI DIMPLE BORGHAIN	SRI SEN BORGHAIN	NATUN RONGAGORA GAON	35106785252	SBIN0007385	25,000.00
25	SRI KAKUL GOGOI	S/O-PARUL GOGOI	NATUN RONGAGORA GAON	1224010353229	UTBI0BRNG84	25,000.00
26	SRI NAYAN JYOTI GOGOI	S/O-PARUL GOGOI	NATUN RONGAGORA GAON	35992715862	SBIN0007385	25,000.00
27	SRI RITUPAN GOGOI	S/O-LT.SARBESWAR GOGOI	NATUN RONGAGORA GAON	32358937415	SBIN0007385	25,000.00
28	SRI UDIP BORGHAIN	S/O- LT PURBA BORGHAIN	NATUN RONGAGORA GAON	11789915408	SBIN0007385	25,000.00
29	SRI SANDESWAR BORGHAIN	S/O-MOLAKA BORGHAIN	NATUN RONGAGORA GAON	11789918715	SBIN0007385	25,000.00
30	SRI DAULAT BORUAH	S/O-LT SAKALA BORUAH	NATUN RONGAGORA GAON	7154010004556	UTBI0RRBAGB	25,000.00
31	SMT TEJIMOLA GOGOI	W/O-PAJANTA GOGOI	NATUN RONGAGORA GAON	7154026006406	UTBI0RRBAGB	25,000.00

32	SRI MRIDUL HAZARIKA	S/O-SRI KANTESWAR HAZARIKA	NATUN RONGAGORA GAON	31773728676	SBIN0007385	25,000.00
33	SMT DIPA NEOG	W/O-DHONESWAR NEOG	NATUN RONGAGORA GAON	20026949755	SBIN0007385	25,000.00
34	SRI GOLAP CH. PATHAK	S/O-LT. BANSIHIDHAR PATHAK	NATUN RONGAGORA GAON	10988142426	SBIN0007385	25,000.00
35	SRI JAYANTA HAZARIKA	SRI NAGEN HAZARIKA	NATUN RONGAGORA GAON	11789901631	SBIN0007385	25,000.00
36	SRI DUMBARUDHAR BARUAH	S/O-LT PULIN BORUAH	NATUN RONGAGORA GAON	34987593039	SBIN0007385	25,000.00
37	SRI DHADIDWAR MORAN	S/O-LT PUNESWAR MORAN	NATUN RONGAGORA GAON	7155010042839	UTBIORRAGB	25,000.00
38	SRI PRASENJIT BARUAH	S/O-SHIREN BARUAH	NATUN RONGAGORA GAON	31210152411	SBIN0007385	25,000.00
39	SMT NITUMONI HAZARIKA	W/O-BISHESWAR HAZARIKA	NATUN RONGAGORA GAON	33067715600	SBIN0007385	25,000.00
40	SRI BITUPAN BURAGOHAIN	S/O-SRI BHABAN BURAGOHAIN	NATUN RONGAGORA GAON	11789916105	SBIN0007385	25,000.00
41	SRI DURESWAR BORUAH	S/O-LT BICHI BORUAH	NATUN RONGAGORA GAON	1224010347518	UTBIORRAG84	25,000.00
42	SMT HUNMONI BORAH	W/O-DIGANTA BORAH	NATUN RONGAGORA GAON	1122104000046987	IBKLO001122	25,000.00

43	SMT. LAKHI BORJAH BORGHAIN	S/O-SRI JYOTISHCO BORGHAIN	NATUN RONGAGORA GAON	7154010010696	UTBIORRBAGR	25,000.00
44	SRI UBUL BORGHAIN	S/O-LT. NARESWAR BORGHAIN	NATUN RONGAGORA GAON	3276193891	CBIN0281286	25,000.00
45	SRI CHANDAN DUTTA	S/O-LT. SIBA DUTTA	NATUN RONGAGORA GAON	11789897964	SBIN0007385	25,000.00
46	SRI ATUL CH BORAH	S/O-LT. HUMNATH BORAH	NATUN RONGAGORA GAON	11789903004	SBIN0007385	25,000.00
47	SMT JUNU GOGOI	W/O-SRI SURESH GOGOI	NATUN RONGAGORA GAON	32385521529	SBIN0007385	25,000.00
48	SMT JUNU GOGOI	M/O-SRI BUIIT GOGOI	NATUN RONGAGORA GAON	7154010005445	UTBIORRBAGB	25,000.00
49	SRI KHIRESWAR HAZARIKA	W/O-LT. NABIN HAZARIKA	NATUN RONGAGORA GAON	33187181476	SBIN0007385	25,000.00
50	SMT HITESHERI BORAUH	W/O-LT. MOHESWAR BORAH	NATUN RONGAGORA GAON	11789920177	SBIN0007385	25,000.00
51	SMT. BINA PHUKAN	W/O-MOLIN PHUKAN	NATUN RONGAGORA GAON	11789920495	SBIN0007385	25,000.00
52	SRI DRHUBAJYOTI GOAHIN	S/O-BHUGEN GOHAIN	NATUN RONGAGORA GAON	59075494096	ALLA0210463	25,000.00
53	SRI ANANDA NAG	S/O-BISHNU NAG	NATUN RONGAGORA GAON	30767411824	SBIN0007385	25,000.00

54	SRI NIHARANJAN BORPATRA	S/O-TILESWAR BORPATRA	NATUN RONGAGORA GAON	09990100007798	BARBOTINSUK	25,000.00
55	SRI CHITRANJAN BORPATRA	S/O-TILESWAR BORPATRA	NATUN RONGAGORA GAON	31524525900	SBIND007385	25,000.00
56	SRI TILESWAR BORPATRA	S/O-LT. MINADHAR BORPATRA	NATUN RONGAGORA GAON	34784871698	SBIND007385	25,000.00
57	SRI SURAJIT BORGHAIN	S/O-JIBAN BORGHAIN	NATUN RONGAGORA GAON	34034106198	SBIND007385	25,000.00
58	SRI JIBAN BORGHAIN	S/O-LT. INDESWAR BORGHAIN	NATUN RONGAGORA GAON	31306852530	SBIND007385	25,000.00
59	SRI PRAMUD PHUKAN	S/O-LT KAMAL PHUKAN	NATUN RONGAGORA GAON	122401065471	UTBI0BRNG84	25,000.00
60	SRI ASHOK NAG	S/O-LT.NABIN NAG	NATUN RONGAGORA GAON	37635171879	SBIND007385	25,000.00
61	SRI MIUKUL HAZARIKA	S/O-LT KANDU HAZARIKA	NATUN RONGAGORA GAON	32606367817	SBIND007385	25,000.00
62	SRI LOKNATH BORAH	S/O-LT GOPAL BORAH	NATUN RONGAGORA GAON	021042010005794	HDFCOCACABL	25,000.00
63	SRI RAJIB BORAH	S/O-LOKNATH BORAH	NATUN RONGAGORA GAON	20188066558	SBIND007385	25,000.00
64	SRI SUMESWAR BORAH	S/O-THANESWAR BORAH	NATUN RONGAGORA GAON	1122104000033734	IBK10001122	25,000.00

65	SMT DIPTI BARUAH	W/O - JOYSINGH BORUAH	NATUN RONGAGORA GAON	33534287005	SBIN0007385	25,000.00
66	SMT. ABHA DUTTA	W/O-GUNIN DUTTA	NATUN RONGAGORA GAON	1122104000047357	IBKL0001122	25,000.00
67	SRI DIGEN BORAH	S/O-KAMAL BORAH	NATUN RONGAGORA GAON	31760089096	SBIN0007385	25,000.00
68	SRI GIRIN DUTTA	S/O-LT PRIYARANJAN DUTTA	NATUN RONGAGORA GAON	30863389240	SBIND003051	25,000.00
69	SMT JAMUNA DUTTA	W/O-LT PRABIN DUTTA	NATUN RONGAGORA GAON	7155010082004	UTBIORR84GB	25,000.00
70	SRI NITUL DUTTA	S/O-LT. PRABIN DUTTA	NATUN RONGAGORA GAON	50100304736637	HDFC0003831	25,000.00
71	SRI TARUN BORAH	S/O- SRI KAMAL BORAH	NATUN RONGAGORA GAON	1224010175562	UTBIORRNG84	25,000.00
72	SRI SUBHA GOGOI	S/O-LT RATNA GOGOI	NATUN RONGAGORA GAON	32308910152	5BIN0007385	25,000.00
73	PUSHPALATA SAIKAI	MONURANJAN SAIKIA	NATUN RONGAGORA GAON	59015780848	ALLA0210463	25,000.00
74	RUNU SAIKIA	LT JAIRAM SAIKIA	NATUN RONGAGORA GAON	1224010182027	UTBIORRNG84	25,000.00
75	BIJUT GOGOI	MOHENDRA GOGOI	NATUN RONGAGORA GAON	1224010217941	UTBIORRNG84	25,000.00

76	NAMITA PHUKAN	LT BUBUL PHUKAN	NATUN RONGAGORA GAON	1224010210836	UTBIORRNG84	25,000.00
77	HEMA BORAH	BROJEN BORAH	NATUN RONGAGORA GAON	30504647475	SBIN0007385	25,000.00
78	PAPAORI GOGOI	DULU GOGOI	NATUN RONGAGORA GAON	31638522525	SBIN0007385	25,000.00
79	HAGESWAR HAZARIKA	LT PREMESWAR HAZARIKA	NATUN RONGAGORA GAON	30380766409	SBIN0007385	25,000.00
80	SUNIT HAZARIKA	HAGESWAR HAZARIKA	NATUN RONGAGORA GAON	50462085748	ALLA0213482	25,000.00
81	BASANTA GHARFALIA	LT BUDHESWAR GHARFALIA	NATUN RONGAGORA GAON	11789903344	SBIN0007385	25,000.00
82	MANU SENAPATI	LT BHADESWAR SENAPATI	NATUN RONGAGORA GAON	32192869799	SBIN0007385	25,000.00
83	KIRAN GOHAIN	LT LALIT GOHAIN	NATUN RONGAGORA GAON	1224010164825	UTBIORRNG84	25,000.00
84	BHANUMATI GOHAIN	MRIDUL GOHAIN	NATUN RONGAGORA GAON	39377483354	SBIN0007385	25,000.00
85	TULESWARI BARUAH	LT GULEN BARUAH	GOTONG	383202010058774	UTBIORRNG84	25,000.00
86	JUGAMAYA GOGOI PATAR	JADU PATAR	GOTONG	3549736364	CBIN0283206	25,000.00
87	PADUMI GOHAIN	LT WOBHABEN GOHAIN	GOTONG	7370225007496	SYNB0007370	25,000.00
88	AKON GOGOI	LT JIBAN GOGOI	GOTONG	7154010004485	UTBIORRBAGB	25,000.00

89	BIJOY GOHAIN	LT WOBHABEN GOHAIN	GOTONG	11789917857	SBIN0007385	25,000.00
90	GITANJALI GOGOI	LILARAM GOGOI	GOTONG	1224010307321	UTBI0BRNG84	25,000.00
91	PROBIN HATI BARUAH	KAMAL HATI BARUAH	GOTONG	3832020100614	UBINO538329	25,000.00
92	BIPLAB DEKA	BARUL DEKA	GOTONG	2030224479	CORP0001354	25,000.00
93	PRABHA GHARPHALIA	LT KOI GHARPHALIA	GOTONG	1224010212014	UTBI0BRNG84	25,000.00
94	MAKHANI GOGOI	BIMAL GOGOI	GOTONG	11739908230	SBIN0007385	25,000.00
95	SUNDAT GHARPHALIA	LT PREM GHARPHALIA	GOTONG	7154010005545	AGVP TINSUKIA	25,000.00
96	LAKSHAN DOWARAH	LT JUGESWAR DOWARAH	GOTONG	7154010004413	UTBI0RRBAGR	25,000.00
97	ANITA PHUKAN	DILIP PHUKAN	GOTONG	30382297945	SBIN0007385	25,000.00
98	PRONITA PHUKAN	RAJIB PHUKAN	GOTONG	1122104000056	IBKLO00122	25,000.00
99	ULUPI GHARPHALIA	RUBUL GHARPHALIA	GOTONG	33664431187	SBIN0007385	25,000.00
100	PAMPI PATAR	PUTUL PATAR	GOTONG	1224010280945	UTBI0BRNG84	25,000.00
101	RUBITA GOGOI	RYBEN GOGOI	GOTONG	5220000001937	NESF0000085	25,000.00
102	RASHMI REKHA GOHAIN	LT WOBHABEN GOHAIN	GOTONG	50190001884104	NESF0000085	25,000.00
103	SIKUN GHARPHALIA	LT PHILA GHARPHALIA	GOTONG	7154010045429	UTBI0RRBAGB	25,000.00
104	RINKU MONI GHARPHALIA	JITU GHARPHALIA	GOTONG	383282120000607	UBIN0538329	25,000.00
105	RUPAHI GOGOI	BAYSHYA GOGOI	GOTONG	35349487453	SBIN0007385	25,000.00
106	POLI GOGOI	VIGU GOGOI	GOTONG	50096308136	ALLA0210463	25,000.00
107	GOKUL GOGOI	MILESWAR GOGOI	GOTONG	73702010018067	SYNB00007370	25,000.00
108	CHINTAMONI GOGOI	MARENDRA GOGOI	GOTONG	10988136160	SBIN0007385	25,000.00
109	PRIYALATA GOGOI	FULESWAR GOGOI	GOTONG	7370225000844	SYNB00007370	25,000.00
110	ABONI HATIBARUAH	KAMAL HATI BARUAH	GOTONG	1224010164757	UTBI0BRNG84	25,000.00
111	JOYDEV HATI BARUAH	JADAV HATIBARUAH	GOTONG	73702010020422	SYNB00007370	25,000.00
112	MAINA GOGOI	ANANTA GOGOI	GOTONG	33273358754	SBIN0007385	25,000.00
113	BOLINA GOGOI	LOREN GOGOI	GOTONG	1224010212755	UTBI0BRNG84	25,000.00
114	LABHITA PHUKAN	MANTU PHUKAN	GOTONG	1224010166782	UTBI0BRNG84	25,000.00
115	PURABI GOGOI	LT PRADIP GOGOI	GOTONG	34329141652	SBIN0007385	25,000.00
116	DIPA CHETIA	BIBEK CHETIA	GOTONG	31384180438	SBIN0007385	25,000.00
117	PRAFULLA GOGOI	LT KAMAL GOGOI	GOTONG	7370201002833	UTBI0RRBAGB	25,000.00

118	MILA NAGBANSHI	GASHA NAGBANSHI	GOTONG	010075226	UTBIORRBAGB	25,000.00
119	BUBUL KHANIKAR	LT AKAN KHANIKAR	GOTONG	6319015684	IDIB000T024	25,000.00
120	JIMONI PHUKAN	SARAT PHUKAN	GOTONG	11789919286	SBIN0007385	25,000.00
121	BABUL BARUAH & DIPIKA BARUAH	PARSURAM BARUAH	NATUN RONGAGORA GAON	36138033658	SBIN0007385	25,000.00
122	ATUL BARUAH	PARSURAM BARUAH	NATUN RONGAGORA GAON	38857105713	SBIN0000196	25,000.00
123	HUNMAI BORGOHAIN	ARUN BORGOHAIN	NATUN RONGAGORA GAON	32385530714	SBIN0007385	25,000.00
124	PALLABI BORGOHAIN	RUPANTA BORGOHAIN	NATUN RONGAGORA GAON	1224010218931	UTBI0BRNG84	25,000.00
125	NARENDRA PATAR	LT CHANDIDIHAR PATAR	NATUN RONGAGORA GAON	30771195894	SBIN0007385	25,000.00
126	MRIDULA CHETIA	LT LAKHI CHETIA	NATUN RONGAGORA GAON	32385522828	SBIN0007385	25,000.00
127	INAMONI PATAR	NARENDRA PATAR	NATUN RONGAGORA GAON	32383788360	SBIN0007385	25,000.00
128	PRIYA NGATE GOGOI	DHRUBAJYOTI GOGOI	NATUN RONGAGORA GAON	50439532865	ALLA0213482	25,000.00
129	JUNALI HAZARIKA	BOKUL HAZARIKA	NATUN RONGAGORA GAON	1224010185776	UTBI0BRNG84	25,000.00
130	JARNA HAZARIKA	GYAN HAZARIKA	NATUN RONGAGORA GAON	20097452401	SBIN0007385	25,000.00

131	JAYANTA DUTTA	PABAN DUTTA	NATUN RONGAGORA GAON	11789901619	SBIN0007385	25,000.00
132	PABAN DUTTA	LT GOPAL DUTTA	NATUN RONGAGORA GAON	11789900592	SBIN0007385	25,000.00
133	KARABI GHARPHALIA	LT DRASING GHARPHALIA	NATUN RONGAGORA GAON	31992127449	SBIN0007385	25,000.00
134	JYOTI BARUAH	PRASANTA BARUAH	NATUN RONGAGORA GAON	33445823311	SBIN0007385	25,000.00
135	BEAUTY GOYARI	BIPIN GOYARI	NATUN RONGAGORA GAON	31635306685	SBIN0007385	25,000.00
136	PARSURAM BARUAH	LT KHAGESWAR BARUAH	NATUN RONGAGORA GAON	30381419412	SBIN0007385	25,000.00
137	ARUNA HAZARIKA	GYAN HAZARIKA	NATUN RONGAGORA GAON	11789921240	SBIN0007385	25,000.00
138	KUJIMA BARUAH	BALU BARUAH	NATUN RONGAGORA GAON	383202010061028	UBIN0538329	25,000.00
139	NIRMALI BORGHAIN	CHINA BORGHAIN	NATUN RONGAGORA GAON	34737593658	SBIN0007385	25,000.00
140	MAINU GOGOI	MAHESH GOGOI	NATUN RONGAGORA GAON	32059476462	SBIN0007385	25,000.00
141	AGEN BORGHAIN	KAMESWAR BORGHAIN	NATUN RONGAGORA GAON	34137952157	SBIN0007385	25,000.00

142	NITA BORGHAIN	RUPAM BORGHAIN	NATUN RONGAGORA GAON	3486480865	CBIN0283206	25,000.00
143	BOBY HAZARIKA	UMAKANTA HAZARIKA	NATUN RONGAGORA GAON	383202010007552	UBIN0538329	25,000.00
144	TOLOK BORGHAIN	MAHENDRA BORGHAIN	NATUN RONGAGORA GAON	38922098167	SBIN0007385	25,000.00
145	SMT. NIRAKHI BARUAH	W/O-SRI PHULEN BARUAH	NATUN RONGAGORA GAON	7154010005464	UTBIORRBAGB	25,000.00
146	SRI MANOJ DUTTA	S/O-LT. AJIT DUTTA	NATUN RONGAGORA GAON	7154010004421	UTBIORRBAGB	25,000.00
147	SMT. NIRUPA DUTTA	C/O LAKHI DUTTA	NATUN RONGAGORA GAON	1224010312738	UTBIORRNG84	25,000.00
148	SMT. PURNIMA SONOWAL	C/O-SRI ANUJ SONOWAL	NATUN RONGAGORA GAON	59074665032	ALLA0210453	25,000.00
149	SMT. HUNTARA DUTTA	C/O-SRI BITUPAN DUTTA	NATUN RONGAGORA GAON	1224010299534	UTBIORRNG84	25,000.00
150	SRI PROMUD NEOG	C/O-LT.SUMEDHAR NEOG	NATUN RONGAGORA GAON	6712010007530	ORBC0100671	25,000.00
151	SRI BHABAN BURAGOHAIN	C/O-BAGARAM BURAGOHAIN	NATUN RONGAGORA GAON	7155010003608	UTBIORRBAGB	25,000.00
152	SMT. PRIYALATA BORGHAIN	C/O-SRI GOBIN BORGHAIN	NATUN RONGAGORA GAON	7154010005444	UTBIORRBAGB	25,000.00

153	SRI KRISHNA KANTA BORAH	C/O-SRI KAMAL BORAH	NATUN RONGAGORA GAON	11789901733	SBIN0007385	25,000.00
154	SRI KAMAL BORAH	C/O-LT. AKON BORAH	NATUN RONGAGORA GAON	11789920858	SBIN0007386	25,000.00
155	SMT. MANJU DUTTA	W/O-SRIDADUL DUTTA	NATUN RONGAGORA GAON	32251821820	SBIN0007385	25,000.00
156	SMT. JUNTI GOGOI	C/O-SRI JUGUT GOGOI	NATUN RONGAGORA GAON	33141564949	SBIN0007385	25,000.00
157	SMT. RITAMONI BORAH PATHAK	C/O-SRI DHIRAJ PATHAK	NATUN RONGAGORA GAON	1122104000047450	IBK10001122	25,000.00
158	SRI SURAJ KUMAR PATHAK	C/O-SRI GULAP CHANDRA PATHAK	NATUN RONGAGORA GAON	30890185050	SBIN0007385	25,000.00
159	BHUDUKI GOGOI	MAHENDRA GOGOI	NATUN RONGAGORA GAON	11789920199	SBIN0007385	25,000.00
160	BIJUMONI HAZARIKA	RANTU HAZARIKA	NATUN RONGAGORA GAON	32602113367	SBIN0007385	25,000.00
161	CHUNITA GANJU	BHUTKA GANJU	NATUN RONGAGORA GAON	35036250177	SBIN0007385	25,000.00
162	PANKAJ PATHAK	GULAP PATHAK	NATUN RONGAGORA GAON	20026949904	SBIN0007385	25,000.00
163	PUTUMONI MORAN GOGOI	RAHUL GOGOI	NATUN RONGAGORA GAON	21088067289	SBIN0007385	25,000.00

164	ROTAN PHUKAN	LT MOLIN PHUKAN	NATUN RONGAGORA GAON	33045042456	SBIN0007385	25,000.00
165	NAJANTI BORA	LT KAMAL BORA	NATUN RONGAGORA GAON	35402036838	SBIN0007385	25,000.00
166	NIRAMA BARUAH	LT BIPUL BARUAH	NATUN RONGAGORA GAON	30469937297	SBIN0007385	25,000.00
167	JANMONI DUTTA	SATYARANJAN DUTTA	NATUN RONGAGORA GAON	7155026000433	UTBIORRBAGB	25,000.00
168	PADMA HAZARIKA	GUPI HAZARIKA	NATUN RONGAGORA GAON	33024546957	SBIN0007385	25,000.00
169	PAKHILI GOGOI	KUMUD GOGOI	NATUN RONGAGORA GAON	11789999823	SBIN0007385	25,000.00
170	KISUR GOGOI	KUMUD GOGOI	NATUN RONGAGORA GAON	31728771035	SBIN0007385	25,000.00
171	RUNU DUTTA	MUNIN DUTTA	NATUN RONGAGORA GAON	1224010213233	UTBIORBRNG84	25,000.00
172	INDRESWAR DUTTA	LT AJIT DUTTA	NATUN RONGAGORA GAON	32606370502	SBIN0007385	25,000.00
173	TARULATA BORGHAIN	SUREN BORGHAIN	NATUN RONGAGORA GAON	11789914200	SBIN0007385	25,000.00
174	GULAPI NEOG	DINESH NEOG	NATUN RONGAGORA GAON	32387413920	SBIN0007385	25,000.00

175	DIPOK NEOG	LT SUMEDHAR NEOG	NATUN RONGAGORA GAON	11789899949	SBIN0007385	25,000.00
176	DAMAYANTI NEOG	SACHIRAM NEOG	NATUN RONGAGORA GAON	73702250004400	SYNB0007370	25,000.00
177	ARUP GOGOI	KUMUD GOGOI	NATUN RONGAGORA GAON	11789919388	SBIN0007385	25,000.00
178	JINALI NEOG	ANIL NEOG	NATUN RONGAGORA GAON	4021400960	CBIN0281286	25,000.00
179	MAHANANDA BORGHAIN	PRABITRA BORGHAIN	NATUN RONGAGORA GAON	34624871740	SBIN0007385	25,000.00
180	JANMONI HAZARIKA	ANITYA HAZARIKA	NATUN RONGAGORA GAON	73702210006377	SYNB0007370	25,000.00
181	MINUMAI GOHAIN	THULAN GOHAIN	NATUN RONGAGORA GAON	3385682539	CBIN0283206	25,000.00
182	HITESWAR MORAN	DANDIDHAR MORAN	NATUN RONGAGORA GAON	37096224379	SBIN0000196	25,000.00
183	DEEPA PHUKAN	LUHIT PHUKAN	NATUN RONGAGORA GAON	1224010180832	UTBI0BRNG84	25,000.00
184	HARESH DUTTA	LT KALUA DUTTA	NATUN RONGAGORA GAON	10988023984	SBIN0000196	25,000.00
185	JITUL DUTTA	LT HARESH DUTTA	NATUN RONGAGORA GAON	20069953772	SBIN0000196	25,000.00

186	GAUTAM GOWALA	LT KALISH GOWALA	NATUN RONGAGORA GAON	1224010313704	UTBIOBRNG84	25,000.00
187	MANISHA GOWALA	SAUTAM GOWALA	NATUN RONGAGORA GAON	1224010338493	UTBIOBRNG84	25,000.00
188	MINTU DUTTA	BALURAM DUTTA	NATUN RONGAGORA GAON	1224010164566	UTBIOBRNG84	25,000.00
189	BALURAM DUTTA	LT GOPAL DUTTA	NATUN RONGAGORA GAON	11789900014	SBIN0007385	25,000.00
190	BHIMACHERI MAHATU	JAGAT MAHATU	NATUN RONGAGORA GAON	36817382394	SBIN0007385	25,000.00
191	BHABESH BORGHAIN	PO BITRA BORGHAIN	NATUN RONGAGORA GAON	11789897771	SBIN0007385	25,000.00
192	JONIRAM SENAPATI	LT LANKESHWAR SENAPATI	NATUN RONGAGORA GAON	31537031904	SBIN0007385	25,000.00
193	NIRMALA HAZARIKA	GUPI HAZARIKA	NATUN RONGAGORA GAON	32383797374	SBIN0007385	25,000.00
194	ALI HAZARIKA	JATIN HAZARIKA	NATUN RONGAGORA GAON	34508347401	SBIN0007385	25,000.00
195	SOCHILA GHARFALIA	LT DRASING GHARFALIA	NATUN RONGAGORA GAON	33654585752	SBIN0007385	25,000.00
196	AMAL GOHAIN	LT NABIN GOHAIN	NATUN RONGAGORA GAON	1224010178792	UTBIOBRNG84	25,000.00

197	APURBA GOHAIN	AMAL GOHAIN	NATUN RONGAGORA GAON	1224010308977	UTBIOBRNG84	25,000.00
198	UDRAJIT GOHAIN	AMAL GOHAIN	NATUN RONGAGORA GAON	20188065747	SBIN0007385	25,000.00
199	KSHIRADA BORGUHAIN	NABA BORGUHAIN	NATUN RONGAGORA GAON	36738704208	SBIN0007385	25,000.00
200	CHINU DUTTA	LT AJIT DUTTA	NATUN RONGAGORA GAON	35548457975	SBIN0007385	25,000.00
201	RAJAT BARUAH	LT HARESWAR BARUAH	NATUN RONGAGORA GAON	3276190630	CBINO281286	25,000.00
202	DHIREN BARUAH	LT SURIYADHAR BARUAH	NATUN RONGAGORA GAON	1224010312448	UTBIOBRNG84	25,000.00
203	RAJIB GOGOI	LT KULADHAR GOGOI	NATUN RONGAGORA GAON	30711385569	UTBIOBRNG84	25,000.00
204	BROJEN BORGUHAIN	BOGESWAR BORGUHAIN	NATUN RONGAGORA GAON	1224010165563	- UTBIOBRNG84	25,000.00
205	ASHOK PRAJA	RAJEN PRAJA	NATUN RONGAGORA GAON	383202120000932	UBIN0538329	25,000.00
206	RINA BORGUHAIN	PABITRA BORGUHAIN	NATUN RONGAGORA GAON	32390009689	SBIN0007385	25,000.00
207	BITU BORGUHAIN	PABITRA BORGUHAIN	NATUN RONGAGORA GAON	737022550004057	SYNB0007370	25,000.00

208	JITU BORGHAIN	PABITRA BORGHAIN	NATUN RONGAGORA GAON	31651033434	SBIND007385	25,000.00
209	RUPAMALA GOHAIN	BHUGEN GOHAIN	NATUN RONGAGORA GAON	32028757519	SBIND007385	25,000.00
210	PRAMILA GOGOI	HARU GOGOI	NATUN RONGAGORA GAON	11789920643	SBIND007385	25,000.00
211	TILU BARUAH	PHULBOR BARUAH	NATUN RONGAGORA GAON	11789920564	SBIND007385	25,000.00
212	BAGESWAR BORGHAIN	LT RONGAI BORGHAIN	NATUN RONGAGORA GAON	33090036106	SBIND007385	25,000.00
213	BANIKANTA CHETIA	LT JAGAT CHETIA	NATUN RONGAGORA GAON	10988161164	SBIND000196	25,000.00
214	PRATI PRAJA	LT BISHNU PRAJA	NATUN RONGAGORA GAON	60284013520	MAHB0001568	25,000.00
215	SUMI NAAG	SHANKAR NAAG	NATUN RONGAGORA GAON	1224010376853	UTBIOBRNG84	25,000.00
216	SILA NAAG	BILA PRAJA	NATUN RONGAGORA GAON	1224010333849	UTBIOBRNG84	25,000.00
217	JUN MONI PHUKAN	POLASH PHUKAN	GOTONG	1224010213219	UTBIOBRNG84	25,000.00
218	RABI MAHATU	LT ANJUM MAHATU	GOTONG	6554330478	IDIB000T144	25,000.00
219	SANJIB KARMAKAR	MANIRAM KARMAKAR	GOTONG	547010000077	IOBA0000547	25,000.00
220	BHUGESWAR CHETIA	KHAGEN CHETIA	GOTONG	1224010177986	UTBIOBRNG84	25,000.00

221	DIPANJALI GHARPHALIA	DULU GHARPHALIA	GOTONG	1122101020056	CNR80001152	25,000.00
222	RENU CHETIA	ANIL CHETIA	GOTONG	31522896263	SBIN000196	25,000.00
223	JITUMONI GOGOI	DHANESH GOGOI	GOTONG	383202010062635	UBIN0538329	25,000.00
224	HARESH GOGOI	HARINATH GOGOI	GOTONG	11789896585	SBIN0007385	25,000.00
225	KARABI PATAR	DIPUL PATAR	GOTONG	50125362865	ALLA0210463	25,000.00
226	ARUP BORGOHAIN	LT BABURAM BORGOHAIN	GOTONG	1224010165433	UTBIOBRNG84	25,000.00
227	BHASKAR BORGOHAIN	LT BABURAM BORGOHAIN	GOTONG	34857053455	SBIN0007385	25,000.00
228	DHIRU NAGBANSHI	DURGA NAGBANSHI	GOTONG	1224010374538	UTBIOBRNG84	25,000.00
229	MINESWARI GOGOI	HOLIDHAR GOGOI	GOTONG	11789920100	SBIN0007385	25,000.00
230	MANIRAM KARMAKAR	SUMATI KARMAKAR	GOTONG	11799908445	SBIN0007385	25,000.00
231	ANIL NAG	LT SUNARAM NAG	GOTONG	34779352126	SBIN0007385	25,000.00
232	ANJALI NAG	LT SUKRA PRAJA	GOTONG	37266969581	SBIN0007385	25,000.00
233	NITU MAHATU	LT CHUTU MAHATU	GOTONG	1224010373340	UTBIOBRNG84	25,000.00
234	PARBATI MAHATU	LT SIBU MAHATU	GOTONG	32842318360	SBIN0007385	25,000.00
235	ASTOMI MAHATU	LOLU MAHATU	GOTONG	6717450986	IDIB000T144	25,000.00
236	MIRA BOSTI DEEPAK	LT SONARA MAHATU	GOTONG	1224010273305	UTBIOBRNG84	25,000.00
237	MONTU PHUKAN	MADHU PHUKAN	GOTONG	34034123432	SBIN0007385	25,000.00
238	MADHU PHUKAN	KODOM PHUKAN	GOTONG	1224010108157	UTBIOBRNG84	25,000.00
239	PRASANTA PHUKAN	LT DEMBESWAR PHUKAN	GOTONG	1224010112703	UTBIOBRNG84	25,000.00
240	TULESWAR GOGOI	SAILYADHAR GOGOI	NATUN RONGAGORA GAON	1102790869	SBIN0000071	25,000.00
241	HIRAKIYOTI GOGOI	TULESWAR GOGOI	NATUN RONGAGORA GAON	09990100007679	BARBTINSUK	25,000.00
242	HITESWAR GOGOI	SAILYADHAR GOGOI	NATUN RONGAGORA GAON	7155010027830	UTBIOBRNG84	25,000.00

243	SHAILYADHAR GOGOI	LT HUMESWAR GOGOI	NATUN RONGAGORA GAON	30504738303	SBIN0007385	25,000.00
244	LEELABATI GOHAIN	PUHESWAR GOHAIN	NATUN RONGAGORA GAON	59082253562	ALLA0210463	25,000.00
245	HUMPA GOHAIN	LT PRABHAT GOHAIN	NATUN RONGAGORA GAON	35150072610	SBIN0007385	25,000.00
246	JIBESWAR BORPATRA	LT KULADHAR BORPATRA	NATUN RONGAGORA GAON	33112472383	SBIN0007385	25,000.00
247	SARALA BORPATRA	JUGANTA BORPATRA	NATUN RONGAGORA GAON	36821590227	SBIN0007385	25,000.00
248	JITU GOGOI	LT NARENDRANATH GOGOI	NATUN RONGAGORA GAON	31610370456	SBIN0007385	25,000.00
249	MONUJ BORPATRA	LT KULADHAR BORPATRA	NATUN RONGAGORA GAON	59069081462	ALLA0210463	25,000.00
250	KALI KHATOWAL	HULAV KHATOWAL	NATUN RONGAGORA GAON	36906857427	SBIN0007385	25,000.00
251	BHARATI KHATOWAL	DOULAT KHATUWAL	NATUN RONGAGORA GAON	37090759740	SBIN0007385	25,000.00
252	LAKHI GHATOWAL	HEMANTA KHATOWAL	NATUN RONGAGORA GAON	36455105227	SBIN0007385	25,000.00
253	POUIKA GOGOI BARUAH	RUBUL BARUAH	NATUN RONGAGORA GAON	1224010252669	UTBIOBRNG84	25,000.00

254	KANTA BORPATRA	LT KULADHAR BORPATRA	NATUN RONGAGORA GAON	59068638903	ALLA0210463	25,000.00
255	PONTULA BORPATRA	LT KULADHAR BORPATRA	NATUN RONGAGORA GAON	11789910103	SBIN0007385	25,000.00
256	GULESWAR BORPATRA	LT KULADHAR BORPATRA	NATUN RONGAGORA GAON	33115020955	SBIN0007385	25,000.00
257	NAYANTI BARUAH	LT BOKUL BARUAH	NATUN RONGAGORA GAON	31061844909	SBIN0007385	25,000.00
258	KHONIN BARUAH	LT BOKUL BARUAH	NATUN RONGAGORA GAON	34166668013	SBIN0007385	25,000.00
259	BHARAT GOGOI	DHRUBAN GOGOI	NATUN RONGAGORA GAON	3281773057	CBIN0283206	25,000.00
260	PUTUL BARUAH	LT RAMESWAR BARUAH	NATUN RONGAGORA GAON	33022550965	SBIN0007385	25,000.00
261	JYOTISH GOGOI	LT NALIRA GOGOI	NATUN RONGAGORA GAON	38940346618	SBIN0007385	25,000.00
262	PULAK GOHAIN	LT HEMANTA GOHAIN	NATUN RONGAGORA GAON	33642789704	SBIN0007385	25,000.00
263	GUNADA GOHAIN	LT HEMANTA GOHAIN	NATUN RONGAGORA GAON	32199684870	SBIN0007385	25,000.00
264	RONGDOI BARUAH	LT GUTIRAM BARUAH	NATUN RONGAGORA GAON	34018854214	SBIN0007385	25,000.00

265	MULEN GOGOI	DHRUBAN GOGOI	NATUN RONGAGORA GAON	32676794440	SBIN0007385	25,000.00
266	NIKITA GOGOI'	DHRUBAN GOGOI	NATUN RONGAGORA GAON	353941171319	SBIN0007385	25,000.00
267	SARNALATA GOHAIN	LT CHANDADHAR GOHAIN	NATUN RONGAGORA GAON	11789920734	SBIN0007385	25,000.00
268	LABANYA BARUAH	LT HEMA BARUAH	NATUN RONGAGORA GAON	20188067290	SBIN0007385	25,000.00
269	ANUP BARUAH	LT HEMA BARUAH	NATUN RONGAGORA GAON	20188065088	SBIN0007385	25,000.00
270	JYANTA BARUAH	LT HEMA BARUAH	NATUN RONGAGORA GAON	20188067438	SBIN0007385	25,000.00
271	SALUMI GOHAIN	TILAK GOHAIN	NATUN RONGAGORA GAON	31107113312	SBIN0007385	25,000.00
272	JUNALI GOHAIN	BIJOY GOHAIN	NATUN RONGAGORA GAON	31081269387	SBIN0000196	25,000.00
273	DILUPI GOHAIN	DHARMESWAR GOHAIN	NATUN RONGAGORA GAON	11789920790	SBIN0007385	25,000.00
274	BICHITRA GOHAIN	ARUN GOHAIN	NATUN RONGAGORA GAON	38794133092	SBIN0007385	25,000.00
275	ARUP GOHAIN	LT MANIK GOHAIN	NATUN RONGAGORA GAON	35059148189	SBIN0007385	25,000.00

276	UMUKUL GOHAIN	LT MANIK GOHAIN	NATUN RONGAGORA GAON	37266968191	SBIN0007385	25,000.00
277	SONMONI GOGOI	UDJAL GOGOI	NATUN RONGAGORA GAON	35106790975	SBIN0007385	25,000.00
278	RATNA NEOG GOGOI	DEEP GOGOI	NATUN RONGAGORA GAON	36136848610	SBIN0007385	25,000.00
279	BHARAT GOHAIN	LT CHANDRADHAR GOHAIN	NATUN RONGAGORA GAON	7154010004432	UTBIORRBAGB	25,000.00
280	AMIT GOHAIN	LT CHANDRADHAR GOHAIN	NATUN RONGAGORA GAON	31470829123	SBIN0007385	25,000.00
281	BIYANJAN GOHAIN	LT CHANDRADHAR GOHAIN	NATUN RONGAGORA GAON	31354422351	SBIN0007385	25,000.00
282	MADHABI BARUAH	LT UPEN BARUAH	NATUN RONGAGORA GAON	32604640176	SBIN0007385	25,000.00
283	INDIRA GOGOI	ROBIT GOGOI	NATUN RONGAGORA GAON	7155010061384	UTBIORRBAGB	25,000.00
284	MANUMOTI CHETIA	DIMBESWAR CHETIA	NATUN RONGAGORA GAON	11789916784	SBIN0000196	25,000.00
285	MINADHAR CHETIA	LT JAGAT CHETIA	NATUN RONGAGORA GAON	30428853519	SBIN0007385	25,000.00
286	SANGITA CHETIA	MAJUN CHETIA	NATUN RONGAGORA GAON	1224010368766	UTBIORRBAGB	25,000.00

287	RUPA SENAPATI	LT AKANI SENAPATI	NATUN RONGAGORA GAON	7155026001433	UTBIORR8AGB	25,000.00
288	ANJUMA SAIKIA GOHAIN	BITUPAN GOHAIN	NATUN RONGAGORA GAON	31619260264	SBIN0007385	25,000.00
289	BHAGYABATI KHATOWAL	AZAD KHATOWAL	NATUN RONGAGORA GAON	31162335410	SBIN0007385	25,000.00
290	REKHA BARUAH	RUPAM BARUAH	NATUN RONGAGORA GAON	32212598354	SBIN0007385	25,000.00
291	PRANALI BARUAH	UMAKANTA BARUAH	NATUN RONGAGORA GAON	35803920095	SBIN0007385	25,000.00
292	LILI BARUAH	ASHOK BARUAH	NATUN RONGAGORA GAON	33090037280	SBIN0007385	25,000.00
293	PUSHPA GOGOI	LT ATUL GOGOI	NATUN RONGAGORA GAON	33616176788	SBIN0007385	25,000.00
294	KALYANI GOGOI	ASHUL GOGOI	NATUN RONGAGORA GAON	59088278606	ALLA0210463	25,000.00
295	HUNTI BARUAH	LT HARESH BARUAH	NATUN RONGAGORA GAON	11789920654	SBIN0007385	25,000.00
296	MINATI GOGOI	BHUPEN GOGOI	NATUN RONGAGORA GAON	1224010195461	UTBIORR84	25,000.00
297	GHUNU BARUAH	LT JUDHA BARUAH	NATUN RONGAGORA GAON	32252425258	SBIN0007385	25,000.00

298	GULU BARUAH	BAJIK BARUAH	NATUN RONGAGORA GAON	30849058146	SBIN0007385	25,000.00
299	RANJUMONI BURAGOHAIN	MULEN BURAGOHAIN	NATUN RONGAGORA GAON	7155010068031	UTBIORRBAGB	25,000.00
300	BIDYABATI GOGOI	LT NALIRA GOGOI	NATUN RONGAGORA GAON	30621279642	SBIN0007385	25,000.00
301	TULLU BURAGOHAIN	LT NARENDRA BURAGOHAIN	NATUN RONGAGORA GAON	31194460222	SBIN0007385	25,000.00
302	NILMONI BARUAH	SHIBA BARUAH	NATUN RONGAGORA GAON	1224010176804	UTBIORBRNG84	25,000.00
303	RINKY BORAH BARUAH	TAPAM BARUAH	NATUN RONGAGORA GAON	1224010249553	UTBIORBRNG84	25,000.00
304	MANI KALITA BARUAH	ANANDA BARUAH	NATUN RONGAGORA GAON	38816521958	SBIN0007385	25,000.00
305	REXONA MAHANTA BURAGOHAIN	REBOT BURAGOHAIN	NATUN RONGAGORA GAON	38793969809	SBIN0007385	25,000.00
306	FULESWAR GOHAIN	LT JAPAN GOHAIN	NATUN RONGAGORA GAON	11789920519	SBIN0007385	25,000.00
307	GULAPI SENAPATI	TARUNCHANDRA SENAPATI	NATUN RONGAGORA GAON	11789920224	SBIN0007385	25,000.00
308	GUNABATI KHATOWAL	DHANIRAM KHATOWAL	NATUN RONGAGORA GAON	11789920268	SBIN0007385	25,000.00

309	TIKA SENAPATI	LT AKAMI SENAPATI	NATUN RONGAGORA GAON	11789920213	SBIN0007385	25,000.00
310	LABANYA GOHAIN	LT MANIK GOHAIN	NATUN RONGAGORA GAON	11789920267	SBIN0007385	25,000.00
311	GUPEN GOGOI	NALIRA GOGOI	NATUN RONGAGORA GAON	11789920257	SBIN0007385	25,000.00
312	AMBIKA DEKA	LT KAMALESWAR DEKA	NATUN RONGAGORA GAON	33654631722	SBIN0007385	25,000.00
313	SURABHI CHETIA	LT JAGAT CHETIA	NATUN RONGAGORA GAON	34095550417	SBIN0000196	25,000.00
314	AKANI BARUAH	RAJANI BARUAH	NATUN RONGAGORA GAON	33058237676	SBIN0007385	25,000.00
315	TUPALI GOGOI	SANJAYMONI GOGOI	NATUN RONGAGORA GAON	11789920586	SBIN0007385	25,000.00
316	NUMALI CHETIA	LT DHIRESWAR CHETIA	NATUN RONGAGORA GAON	1224010178099	UTBI0BRNG84	25,000.00
317	MULAPI GOHAIN	NMONIRAM GOHAIN	NATUN RONGAGORA GAON	11789920279	SBIN0007385	25,000.00
318	KUMALI GOGOI	LT HUKHEN GOGOI	NATUN RONGAGORA GAON	11789920508	SBIN0007385	25,000.00
319	MAKANI BARUAH	LT BIRESWAR BARUAH	NATUN RONGAGORA GAON	11789920789	SBIN0007385	25,000.00

320	PAKHILI BARUAH	LT HALEN BARUAH	NATUN RONGAGORA GAON	11789920575	SBIN0007385	25,000.00
321	TILU GOGOI	BIREN GOGOI	NATUN RONGAGORA GAON	11789920531	SBIN0007385	25,000.00
322	KHIRADA BURAGOHAIN	MANIDHAR BURAGOHAIN	NATUN RONGAGORA GAON	11789920609	SBIN0007385	25,000.00
323	DURGA SONOWAL	LT DIPEN SONOWAL	NATUN RONGAGORA GAON	3648577650	CBIN0283206	25,000.00
324	BHANOMOTI SAIKIA	PABAN SAIKIA	NATUN RONGAGORA GAON	36331680493	SBIN0007385	25,000.00
325	JULE DEKA	REKHAB DEKA	NATUN RONGAGORA GAON	1224010191616	UTBIOBRNG84	25,000.00
326	DILIP DEKA	LT AMIT DEKA	NATUN RONGAGORA GAON	33100188552	SBIN0007385	25,000.00
327	RUNUMI SONOWAL	UTPALSONOWAL	NATUN RONGAGORA GAON	7155010077853	UTBIORRBAGB	25,000.00
328	DIPANKAR SONOWAL	LT TULAN SONOWAL	NATUN RONGAGORA GAON	31827408294	SBIN0007385	25,000.00
329	ANAMIKA SONOWAL	LT TULAN SONOWAL	NATUN RONGAGORA GAON	31610193985	SBIN0007385	25,000.00
330	PARBATI DEKA	BAKESH DEKA	NATUN RONGAGORA GAON	1224010357906	UTBIOBRNG84	25,000.00

331	ASHOK KURMI	LT SHANKAR KURMI	NATUN RONGAGORA GAON	34827041843	SBIN0007385	25,000.00
332	MADHURI GOHAIN	BABUL GOHAIN	NATUN RONGAGORA GAON	33080421339	SBIN0007385	25,000.00
333	SANTUSH KURMI	LT TEMPU KURMI	NATUN RONGAGORA GAON	33857809863	SBIN0007385	25,000.00
334	SUBHADRA SONOWAL	LT BIDESWAR SONOWAL	NATUN RONGAGORA GAON	11789913239	SBIN0007385	25,000.00
335	PADUMI DEKA	LT AMIT DEKA	NATUN RONGAGORA GAON	33967335081	SBIN0007385	25,000.00
336	NAGEN SONOWAL	LT KALESWAR SONOWAL	NATUN RONGAGORA GAON	59069383134	ALLA0210463	25,000.00
337	AJIT PROJA	RAJEN PRAJA	NATUN RONGAGORA GAON	32177510069	SBIN0007385	25,000.00
338	JAMUNA KURMI	BINUD KURMI	NATUN RONGAGORA GAON	59069081553	ALLA0210463	25,000.00
339	NIMAI KURMI	LT GHACHIYA KURMI	NATUN RONGAGORA GAON	32219373626	SBIN0007385	25,000.00
340	LOLITA SENAPATI	PUNA SENAPATI	NATUN RONGAGORA GAON	11789920122	SBIN0007385	25,000.00
341	BINUD HAZARIKA	GHITIK HAZARIKA	NATUN RONGAGORA GAON	09990100005695	BARBOTINSUK	25,000.00

342	RANU MONI SAIKIA	GAGA SAIKIA	NATUN RONGAGORA GAON	1224010210980	SBIN0007385	25,000.00
343	RANA SAIKIA	HUKLA SAIKIA	NATUN RONGAGORA GAON	1224010210980	UTBIOBRNG84	25,000.00
344	PADAJA SENAPATI	LT HARU BSENAPATI	NATUN RONGAGORA GAON	33100214379	SBIN0007385	25,000.00
345	PUSHPANJALI BURAGOHAIN	LOBHIT BURAGOHAIN	NATUN RONGAGORA GAON	59086278651	ALLA0210463	25,000.00
346	JAYAGOHAIN BARUAH	MALAKA BARUAH	NATUN RONGAGORA GAON	59069081279	ALLA0210463	25,000.00
347	DHANADA BARUAH	DULU BARUAH	NATUN RONGAGORA GAON	59086278640	ALLA0210463	25,000.00
348	TARINI SAIKIA	LT DINARAM KALITA	NATUN RONGAGORA GAON	36107215455	SBIN0007385	25,000.00
349	DIPALI DEKA	LT NARAIYAN DEKA	NATUN RONGAGORA GAON	11789917201	SBIN0007385	25,000.00
350	BIPIN MAZUMDER	LT SUNESWAR MAZUMDER	NATUN RONGAGORA GAON	33072588312	SBIN0007385	25,000.00
351	NIRADA DEKA	ATUL DEKA	NATUN RONGAGORA GAON	36878387232	SBIN0007385	25,000.00
352	NARESH KURMI	PETU KURMI	NATUN RONGAGORA GAON	31865908155	SBIN0007385	25,000.00

353	CHITRALEKHA BARUAH	DALIM BARUAH	NATUN RONGAGORA GAON	32383807758	SBIN0007385	25,000.00
354	BIPUL SENAPATI	LT HARU SENAPATI	NATUN RONGAGORA GAON	31864039058	SBIN0007385	25,000.00
355	BABU KURMI	LT BUDHU KURMI	NATUN RONGAGORA GAON	30983738514	SBIN0007385	25,000.00
356	TILAK GOGOI	LT RABIN GOGOI	NATUN RONGAGORA GAON	20188067041	SBIN0007385	25,000.00
357	SMRITIREKA BARUAH NEOG	MISTEL NEOG	NATUN RONGAGORA GAON	50355677917	ALLA0213482	25,000.00
358	DIPANKAR GOGOI	LT GAMBHIR GOGOI	NATUN RONGAGORA GAON	20275293866	SBIN0003051	25,000.00
359	RIMA GOHAIN	MONUJ GOHAIN	NATUN RONGAGORA GAON	59069383087	ALLA0210463	25,000.00
360	RUMI SAIKIA CHETIA	BABUL CHETIA	NATUN RONGAGORA GAON	7155010081218	UTBIORRBAGB	25,000.00
361	TILAMONI KURMI	NAKUL KURMI	NATUN RONGAGORA GAON	1224010237055	UTBIORRBNG84	25,000.00
362	RUMI GOGOI	RAJEN GOGOI	NATUN RONGAGORA GAON	35300464952	SBIN0007385	25,000.00
363	NAMITA HAZARIKA	JATIN HAZARIKA	NATUN RONGAGORA GAON	31630811569	SBIN0007385	25,000.00

364	ANAMIKA CHETIA	DEBAKANTA CHETIA	NATUN RONGAGORA GAON	35402056833	SBIN0007385	25,000.00
365	RUBI SINGH	RAJANI BARUAH	NATUN RONGAGORA GAON	0013010387606	UTBI0TSK311	25,000.00
366	TARATI NEOG	DHIREN NEOG	NATUN RONGAGORA GAON	50365677804	ALLAD210463	25,000.00
367	AMAL KURMI	PETU KURMI	NATUN RONGAGORA GAON	31188087737	SBIN0007385	25,000.00
368	PETU KURMI	ANANDA KURMI	NATUN RONGAGORA GAON	34310632764	SBIN0007385	25,000.00
369	TINKU KHARIA	TIPU KHARIA	NATUN RONGAGORA GAON	31640333940	SBIN0007385	25,000.00
370	DULARI MURA	LT SITARAM MURA	NATUN RONGAGORA GAON	1224010327527	UTBI0BRNG84	25,000.00
371	MUNU KHARIA	KUNDAN KHARIA	NATUN RONGAGORA GAON	1224010286886	UTBI0BRNG84	25,000.00
372	SATYARANJAN BARUAH	BIMAL BARUAH	NATUN RONGAGORA GAON	30432476496	SBIN0007385	25,000.00
373	GULAP CHANDRA GOGOI	NALIA GOGOI	NATUN RONGAGORA GAON	31638501388	SBIN0007385	25,000.00
374	LAVOT GOGOI	GUPEN GOGOI	NATUN RONGAGORA GAON	31620767202	SBIN0007385	25,000.00

375	BISHA GOGOI	BADAK GOGOI	NATUN RONGAGORA GAON	30801120712	SBIN0007385	25,000.00
376	BISHNU DIHINGIYA	NAGESWAR DIHINGIYA	NATUN RONGAGORA GAON	34611258819	SBIN0007385	25,000.00
377	BORNALI BORUAH	BISHWAJIT BORUAH	NATUN RONGAGORA GAON	33536540454	SBIN0007385	25,000.00
378	PALLABI CHETIA	TONEN CHETIA	NATUN RONGAGORA GAON	33552695056	SBIN0007385	25,000.00
379	BROJEN BARUAH	RAMESWAR BARUAH	NATUN RONGAGORA GAON	1224010175661	UTBI0BRNG84	25,000.00
380	BULBULI GOGOI	BASHANTA GOGOI	NATUN RONGAGORA GAON	35238428380	SBIN0007385	25,000.00
381	JUGANANDA GOGOI	BASANTA GOGOI	NATUN RONGAGORA GAON	32202695280	SBIN0007385	25,000.00
382	AMBIKA SONOWAL	LOBIT SONOWAL	NATUN RONGAGORA GAON	31638505087	SBIN0007385	25,000.00
383	PARASH GARH	SRI RAM GARH	NATUN RONGAGORA GAON	31106902125	SBIN0007385	25,000.00
384	NIRODA SONOWAL	MITRA SONOWAL	NATUN RONGAGORA GAON	7155010059547	UTBI0RRBAGB	25,000.00
385	BIJUT GOHAIN	POHESWAR GOHAIN	NATUN RONGAGORA GAON	181110100048238	ANDB0001811	25,000.00

386	PUTULI MEDHI	GUPEN MEDHI	NATUN RONGAGORA GAON	11789910782	SBIN0007385	25,000.00
387	KARUNA KANTA MEDHI	RAMA KANTA MEDHI	NATUN RONGAGORA GAON	11789907178	SBIN0007385	25,000.00
388	SAPNA GARH	DUKHESH GARH	NATUN RONGAGORA GAON	1224010246927	UTBI0BRNG84	25,000.00
389	BINA BARUAH	ANIL BARUAH	NATUN RONGAGORA GAON	7155010081005	UTBI0RRBAGB	25,000.00
390	POHESWAR GOHAIN	BHAGESWAR GOHAIN	NATUN RONGAGORA GAON	11789920348	SBIN0007385	25,000.00
391	RACHANA SONOWAL	JUGE SONOWAL	NATUN RONGAGORA GAON	31608700151	SBIN0007385	25,000.00
392	SUNESWAR BARUAH	LT BHADIRAM BARUAH	NATUN RONGAGORA GAON	09990100007792	BARBOTINSUK	25,000.00
393	PURNIMA GOHAIN	PROSANNA GOHAIN	NATUN RONGAGORA GAON	34508349340	SBIN0007385	25,000.00
394	KRISHNA KHARIA	BIRCHA KHARIA	NATUN RONGAGORA GAON	1224010374965	UTBI0BRNG84	25,000.00
395	BIBHA SAIKIA	ROBIN SAIKIA	NATUN RONGAGORA GAON	50389745018	ALLA0210463	25,000.00
396	BIPEN SAIKIA	BALIN SAIKIA	NATUN RONGAGORA GAON	30392704303	SBIN0007385	25,000.00

397	BIRSHI KHARIA	RAKESH KHARIA	NATUN RONGAGORA GAON	34855695940	SBIN0007385	25,000.00
398	LAKYAHIRA SONOWAL	RUPU SONOWAL	NATUN RONGAGORA GAON	1224010357371	UTBI0BRNG84	25,000.00
399	MONTU GOGOI	GUPEN GOGOI	NATUN RONGAGORA GAON	34189943708	SBIN0007385	25,000.00
400	MUKUT BARUAH	HARESH BARUAH	NATUN RONGAGORA GAON	50190001556292	NESF0000085	25,000.00
401	AJIT GOHAIN	SO UNAK GOHAIN	NATUN RONGAGORA GAON	34310628849	SBIN0007385	25,000.00
402	ASHIK BORUAH	HARUKANTA BARUAH	NATUN RONGAGORA GAON	1152101020287	CNR80001152	25,000.00
403	SUBASH BARUAH	LT RAMESHWAR BARUAH	NATUN RONGAGORA GAON	11789918352	SBIN0007385	25,000.00
404	DIPON BARUAH	DUTIRAM BARUAH	NATUN RONGAGORA GAON	20188066432	SBIN0007385	25,000.00
405	DHANTI BURAGOHAIN	MONIDHAR BURAGOHAIN	NATUN RONGAGORA GAON	1224010176309	UTBI0BRNG84	25,000.00
406	PRANATI BARUA	UPEN BARUA	NATUN RONGAGORA GAON	59069216673	ALLA0210463	25,000.00
407	KRISHNA MANI KURMI	PABAN KURMI	NATUN RONGAGORA GAON	35820313273	SBIN0007385	25,000.00

408	RITA KURMI	CHUTU KURMI	NATUN RONGAGORA GAON	1224010371063	UTBI0BRNG84	25,000.00
409	SUCHILA KURMI	LT DHUNU KURMI	NATUN RONGAGORA GAON	32290794387	SBIN0007385	25,000.00
410	BINOD SONOWAL	LT BIDESWAR SONOWAL	NATUN RONGAGORA GAON	11789903810	SBIN0007385	25,000.00
411	DIPANJALI NEOG SONOWAL	JALEN SONOWAL	NATUN RONGAGORA GAON	7155010080051	UTBI0RRBAGB	25,000.00
412	ANJALI SONOWAL DEKA	BHADESWAR DEKA	NATUN RONGAGORA GAON	31095620660	SBIN0007385	25,000.00
413	BIMLA SONOWAL	DAMODAR SONOWAL	NATUN RONGAGORA GAON	1224010237840	UTBI0BRNG84	25,000.00
414	KESHABSONOWAL	LT. SUCHEN CHELENG	NATUN RONGAGORA GAON	30381399652	SBIN0007385	25,000.00
415	MINAKHI SAIKIA	PRANAB JYOTI SAIKIA	NATUN RONGAGORA GAON	32251820532	SBIN0007385	25,000.00
416	BULBULI SONOWAL	GIRINDRA SONOWAL	NATUN RONGAGORA GAON	33669172668	SBIN0007385	25,000.00
417	JAYANTA KHATOWAL	PROBIN KHATOWAL	NATUN RONGAGORA GAON	1224010175579	UTBI0BRNG84	25,000.00
418	DAPAN KHATOWAL	PROBIN KHATOWAL	NATUN RONGAGORA GAON	32080204015	SBIN0007385	25,000.00

419	LUDUB BARUAH	BIRESWAR BARUAH	NATUN RONGAGORA GAON	31884837236	SBIN0007385	25,000.00
420	BHARATI SONOWAL	BIJOY SONOWAL	NATUN RONGAGORA GAON	50114032920	ALLA0210463	25,000.00
421	ANIL SONOWAL	DHARANI SONOWAL	NATUN RONGAGORA GAON	10988162293	SBIN0007385	25,000.00
422	KUSHADHAR SONOWAL	DHARANIDHAR SONOWAL	NATUN RONGAGORA GAON	31304225884	SBIN0007385	25,000.00
423	MITALI GOHAIN	RAKESH GOHAIN	NATUN RONGAGORA GAON	32344033119	SBIN0007385	25,000.00
424	PRABAL GOHAIN	LT SURYA GOHAIN	NATUN RONGAGORA GAON	31211853381	SBIN0007385	25,000.00
425	PUNYABATI SONOWAL	PUNOSWAR SONOWAL	NATUN RONGAGORA GAON	32305053766	SBIN0007385	25,000.00
426	AKON SONOWAL	NIREN SONOWAL	NATUN RONGAGORA GAON	7155010071600	UTBIORRBAGB	25,000.00
427	RATNA SONOWAL	LAKHINDRA SONOWAL	NATUN RONGAGORA GAON	59069185519	ALLA0210463	25,000.00
428	RENU KHARIA	RAMESH KHARIA	NATUN RONGAGORA GAON	32161239673	SBIN0007385	25,000.00
429	RAHUL SAIKIA	ROBIN SAIKIA	NATUN RONGAGORA GAON	1224010372855	UTBIORRNG84	25,000.00

430	SUMITRA KURMI	SUTRI KURMI	NATUN RONGAGORA GAON	1224010236993	UTBI0BRNG84	25,000.00
431	SIBA NATH BORAH	GOPAL CHANDRA BORAH	NATUN RONGAGORA GAON	1224010102642	UTBI0BRNG84	25,000.00
432	BUDHIN KACHARI	GHANA KANTA KACHARI	NATUN RONGAGORA GAON	33014197238	SBIN0007385	25,000.00
433	ANJAN BORAH	AJIT BORAH	NATUN RONGAGORA GAON	1224010110297	UTBI0BRNG84	25,000.00
434	ANITA DUTTA	LT. NABIN DUTTA	NATUN RONGAGORA GAON	11789902512	SBIN0007385	25,000.00
435	BORNALI DUTTA	BABUL DUTTA	NATUN RONGAGORA GAON	32248791821	SBIN0007385	25,000.00
436	SWALA DUTTA	LT. NARAYAN DUTTA	NATUN RONGAGORA GAON	11789921002	SBIN0007385	25,000.00
437	JOGEN NATH	LT. KALIA NATH	NATUN RONGAGORA GAON	11789915157	SBIN0007385	25,000.00
438	UPEN NATH	LT. KALIA NATH	NATUN RONGAGORA GAON	1122104000079019	IBKL0001122	25,000.00
439	JITU DUTTA	HUMESWAR DUTTA	NATUN RONGAGORA GAON	3803597412	CBIN0281286	25,000.00
440	BADAN DUTTA	LT. HALIA DUTTA	NATUN RONGAGORA GAON	786010202	ALLA0210463	25,000.00

441	RUPANJALI DUTTA	DIPAK DUTTA	NATUN RONGAGORA GAON	1122104000048392	IBKLO001122	25,000.00
442	TULSI NEOG	LT. KALESWAR NEOG	NATUN RONGAGORA GAON	7154010018133	UTBIORRBAGB	25,000.00
443	SANGEETA GOGOI NEOG	LUHIT NEOG	NATUN RONGAGORA GAON	7155010089186	UTBIORRBAGB	25,000.00
444	JINTU BORGHAIN	TULUK BORGHAIN	NATUN RONGAGORA GAON	20097452398	SBIN0007385	25,000.00
445	PARUL RAJKHOWA	RATNESWAR RAJKHOWA	NATUN RONGAGORA GAON	1122104000049869	IBKLO001122	25,000.00
446	JOYMOTI DUTTA	LT. GOBIN DUTTA	NATUN RONGAGORA GAON	30534953861	SBIN0007385	25,000.00
447	KUSHAL NEOG	TULSI NEOG	NATUN RONGAGORA GAON	33517851735	SBIN0007385	25,000.00
448	NIRAMA GOGOI	LT. HARBESWAR GOGOI	NATUN RONGAGORA GAON	11789916434	SBIN0007385	25,000.00
449	LUKUMONI DUTTA	UDIP DUTTA	NATUN RONGAGORA GAON	383202010062196	UBIN0538329	25,000.00
450	CHAMPA GOHAIN	LT. KANKA GOHAIN	NATUN RONGAGORA GAON	31313323686	SBIN0007385	25,000.00
451	TARABOTI BARUAH	LT. PULIN BARUAH	NATUN RONGAGORA GAON	11789920144	SBIN0007385	25,000.00

452	RUPALI BARUAH	LT. BAICHI BARUAH	NATUN RONGAGORA GAON	11789911946	SBIND007385	25,000.00
453	MILLASHARI GOGOI	LT. JAGAT GOGOI	NATUN RONGAGORA GAON	11789920676	SBIND007385	25,000.00
454	SANMONI GUWALA	RAJU GUWALA	NATUN RONGAGORA GAON	50479586723	SBIND007385	25,000.00
455	LUTTAM NEOG	TULSHI NEOG	NATUN RONGAGORA GAON	33190500179	SBIND007385	25,000.00
456	PABIN GOHAIN	LT. KANKA GOHAIN	NATUN RONGAGORA GAON	11789919264	SBIND007385	25,000.00
457	KAROBI GOGOI	MONTU GOGOI	NATUN RONGAGORA GAON	383202120000299	UBIN0538329	25,000.00
458	PURNIMA HATIBARUAH	BHIKARAJ HATIBARUAH	NATUN RONGAGORA GAON	181110100066304	ANDB0001811	25,000.00
459	HIRAKYOTI HATIBARUAH	BHIKARAJ HATIBARUAH	NATUN RONGAGORA GAON	35548884260	SBIND000196	25,000.00
460	RUPALI GOGOI	GHANA GOGOI	NATUN RONGAGORA GAON	39206740863	SBIND007385	25,000.00
461	RAJESHARI HAZARIKA	LT. GHITIK HAZARIKA	NATUN RONGAGORA GAON	11789920698	SBIND007385	25,000.00
462	RATANLAL PROJA	AMAR PROJA	NATUN RONGAGORA GAON	20188064551	SBIND007385	25,000.00

463	AMI PROJA	AMAR PROJA	NATUN RONGAGORA GAON	1224010230735	UTBI0BRNG84	25,000.00
464	GEETIKA KHATOWAL	JINTU BORGHAIN	NATUN RONGAGORA GAON	31381764813	SBIN0000196	25,000.00
465	KUNTI CHAURA	BHUTKU PROJA	NATUN RONGAGORA GAON	1224010288408	UTBI0BRNG84	25,000.00
466	DURANTA HAZARIKA	DHIRESWAR HAZARIKA	NATUN RONGAGORA GAON	3276544514	CBIN0281286	25,000.00
467	MAHESH GOGOI	KESAB GOGOI	NATUN RONGAGORA GAON	50180018287159	BD810001506	25,000.00
468	ASHOK PROJA	RAJEN PROJA	NATUN RONGAGORA GAON	7155010084394	UTBI0RRSAGB	25,000.00
469	GITA NAG	KRISHNA NAG	NATUN RONGAGORA GAON	3576860063	SBIN0007385	25,000.00
470	CITI PRAJA	JOYLAL PRAJA	NATUN RONGAGORA GAON	054701000013948	IOBA0000547	25,000.00
471	JINARAM PRAZA	LT JIYANA PRAZA	NATUN RONGAGORA GAON	11789906639	SBIN0007385	25,000.00
472	FUNAMATI GAR	PETU GAR	NATUN RONGAGORA GAON	36821589766	SBIN0007385	25,000.00
473	RUKMONI LOKHIRAM	LR LOKHIRAM PRAJA	NATUN RONGAGORA GAON	33035628248	SBIN0007385	25,000.00

474	KOLPONA PRAJA	NARESH PRAJA	NATUN RONGAGORA GAON	50492167513	ALLA0210463	25,000.00
475	JOIRAM PRAJA	NARSU PRAJA	NATUN RONGAGORA GAON	34779437601	SBIN0007385	25,000.00
476	JOLINA PROJA	BANDHAN PROJA	NATUN RONGAGORA GAON	1224010338042	UTBI0BRNG84	25,000.00
477	SANJIV PROJA	LT KANCHAN PROJA	NATUN RONGAGORA GAON	1224010229135	UTBI0BRNG84	25,000.00
478	GITA PRAJA	BODAI PRAJA	NATUN RONGAGORA GAON	3748509754	CBIN028186	25,000.00
479	AKASH NAG	LT SONARAM NAG	NATUN RONGAGORA GAON	20275294521	SBIN0003051	25,000.00
480	ANITA NAG	SAMBHU NAG	NATUN RONGAGORA GAON	35266970744	SBIN0007385	25,000.00
481	BIKRAM KUMAR	LT BODRAM KUMAR	NATUN RONGAGORA GAON	7155010066130	UTBI0RRBAGB	25,000.00
482	TARUN BORGHAIN	APIT BORGHAIN	NATUN RONGAGORA GAON	1224010185634	UTBI0BRNG84	25,000.00
483	BOBITA NAG	ARUN NAG	NATUN RONGAGORA GAON	50491797206	ALLA0210463	25,000.00
484	NIMAI PRAJA	KUSHA PRAJA	NATUN RONGAGORA GAON	054701000014036	IOBA0000547	25,000.00

485	RINA PRAJA	BIKASH PRAJA	NATUN RONGAGORA GAON	31820639919	SBIN0007385	25,000.00
486	RUHA NAG	PANDU PRAJA	NATUN RONGAGORA GAON	1224010376723	UTBI0BRNG84	25,000.00
487	NABIN PRAJA	MOHAN PRAJA	NATUN RONGAGORA GAON	33210357742	SBIN0007385	25,000.00
488	HIREN SENAPATI	JONIRAM SENAPATI	NATUN RONGAGORA GAON	7155010030092	UTBI0RRBAGB	25,000.00
489	SIDARTHA BORGHAIN	NABA BORGHAIN	NATUN RONGAGORA GAON	50190001130544	NESF0000085	25,000.00
490	KANDU HAZARIKA	PRESWAR HAZARIKA	NATUN RONGAGORA GAON	11789920814	SBIN0007385	25,000.00
491	JONA SENAPATI	KHARGESWAR SENAPATI	NATUN RONGAGORA GAON	30716609686	SBIN0007385	25,000.00
492	SUWALA SENAPATI	JAYANTA SENAPATI	NATUN RONGAGORA GAON	32013287561	SBIN0007385	25,000.00
493	LAKHYAJIT BARUAH	BABUL BARUAH	NATUN RONGAGORA GAON	05460110042755	UCBA0000546	25,000.00
494	JOGU NAGBANSHI	INDRA NAHBANSHI	NATUN RONGAGORA GAON	1224010311816	UTBI0BRNG84	25,000.00
495	JUNMONI BORGHAIN	DEBOJIT BORGHAIN	NATUN RONGAGORA GAON	50487910478	ALLA0210463	25,000.00

496	PAPORI BORGHAIN	DEBESHWAR BORGHAIN	NATUN RONGAGORA GAON	33084115330	SBIN0007385	25,000.00
497	AKHIM BORGHIN	LT BABURAM BORGHAIN	GOTONG	1224010203616	UTBI0BRNG84	25,000.00
498	KATIRAM BORGHAIN	LT DEBEN BORGHAIN	GOTONG	1224010167567	UTBI0BRNG84	25,000.00
499	RANJIT KARMAKAR	MANIRAM KARMAKAR	GOTONG	35999935165	SBIN0007385	25,000.00
500	PROMILA GOGOI	LT PETUKAN GOGOI	GOTONG	31152973996	SBIN0007385	25,000.00
501	PRENADA MOHAN	CHIKUN MOHAN	GOTONG	73702250007274	SYNB0007370	25,000.00
502	SOLITA S. ASSAMBOTI	RAMU NAGBANSHI	GOTONG	054701000012232	IOBA0000547	25,000.00
503	PHULSON NAG	LT LAKHI NAG	GOTONG	34302454382	SBIN0007385	25,000.00
504	DHON MAHATO	LEHERA MAHATO	GOTONG	36091419508	SBIN0007385	25,000.00
505	SURAJ NAGBANSHI	LT BISHNUJ NAGBANSHI	GOTONG	36821626835	SBIN0007385	25,000.00
506	BUDHANI JETIN	BUDHN NAGBANSHI	GOTONG	054701000013460	IOBA0000547	25,000.00
507	BUDHINI HATIBARUAH	ANANDA HATIBARUAH	GOTONG	20142888889	SBIN0007385	25,000.00
508	SRI PRAKASH GOGOI	LT. PRADIP GOGOI	GOTONG	1224010180153	UTBI0BRNG84	25,000.00
509	SRI BRAJEN GHARPHALIYA	LT. PREMA GHARPHALIYA	GOTONG	1224010169219	UTBI0BRNG84	25,000.00
510	SMT.SUBHODRA GOGOI	SRI ANJAN GOGOI	GOTONG	73702250008315	SYNM0007370	25,000.00
511	SRI AMIT GOHAIN	SRI JATIN MOHAN	GOTONG	35149893303	SBIN0007385	25,000.00
512	SMT. RISHMA GOGOI	SRI JINTU GOGOI	GOTONG	1224010212366	UTBI0BRNG84	25,000.00
513	SRI ROMEN GOGOI	LT. BIPIN GOGOI	GOTONG	33128738937	SBIN0007385	25,000.00
514	SRI GIRISHCHANDRA GOGOI	SRI BHUGRAM GOGOI	GOTONG	1224010244770	UTBI0BRNG84	25,000.00
515	SRI LUKU GHARPHALIYA	SRI PREM GHARPHALIYA	GOTONG	7154010004418	UTBI0RRBAGB	25,000.00
516	SRI RAJEN DUARA	SRI LAKHAN DUARA	GOTONG	34358396446	SBIN0007385	25,000.00
517	SMT RUPA PHUKAN	LT KAMAL PHUKAN	GOTONG	11789911913	SBIN0007385	25,000.00

518	SRI BIPOV GOGOI	JEUTI GOGOI	GOTONG	1939320	SBIN000196	25,00
519	SMT RANGDAI PHUKAN	CHAMPESWAR PHUKAN	GOTONG	1224010166744	UTBI0BRNG84	25,000.00
520	SMT HEMANTI HATIBARUAH	LUHIT HATIBARUAH	GOTONG	34137939282	SBIN0007385	25,000.00
521	SMT INDUMONI GOGOI	LT HULEDHAR GOGOI	GOTONG	73702250007670	SYNB0007370	25,000.00
522	MR ARINDOM GOGOI	ANANTA GOGOI	GOTONG	20188066047	SBIN0007385	25,000.00
523	SRI PRANAB GOGOI	LT LILADHAR GOGOI	GOTONG	34524159065	SBIN0007385	25,000.00
524	SMT JOYAMONI GOGOI	SRI BHARAT GOGOI	GOTONG	73702010022710	SYNB0007370	25,000.00
525	RANJITA HATIBARUAH	SRI MAKHAN HATIBARUAH	GOTONG	36114037072	SBIN0007385	25,000.00
526	SMT ANJANA MAHATO	TINKU MAHATO	GOTONG	547010000547	IOBA0000547	25,000.00
527	SRI PURNANANDA PATAR	LT SANDEEP PATAR	GOTONG	6712010007540	ORB00100671	25,000.00
528	SRI NAREN CHETIA	KAMAL CHETIA	GOTONG	73702250007589	SYNB0007370	25,000.00
529	SRI BINANDRA CHETIA	ANIL CHETIA	GOTONG	3279108722	CBIN0281286	25,000.00
530	SRI JAYANTA GOGOI	HARINATH GOGOI	GOTONG	7154010008638	UTBI0RRBAGB	25,000.00
531	RASHMI REKHA HATIBARUAH	RAHUL HATIBARUAH	GOTONG	1224010166706	UTBI0BRNG84	25,000.00
532	SRI BULEN GOGOI	MILESWAR GOGOI	GOTONG	1152101020354	CNRB0001152	25,000.00
533	SMT SURABHI KHANIKAR	TOGAR KHANIKAR	GOTONG	7154010076377	UTBI0RRBAGB	25,000.00
534	SRI JOTEEN MOHAN	LT DHARMESWAR MOHAN	GOTONG	11789906797	SBIN0007385	25,000.00
535	SRI HEMANTA GOGOI	SRI BHUGRAM GOGOI	GOTONG	7154010004514	UTBI0RRBAGB	25,000.00
536	SMT HIRABATI GOGOI	LT DULA GOGOI	GOTONG	30446966892	SBIN0007385	25,000.00
537	SRI BIKUL GHARPHALIYA & POLI GHARPHALIYA	LT. PUTUL GHARPHALIYA	GOTONG	3431626579	SBIN0007385	25,000.00

538	SRI KAMAL HATIBARUAH	DEBAJIT HATIBARUAH	GOTONG	557402010002926	UBIN0538329	25,000.00
539	SRI MULEN GOHAIN	LT JITEN GOHAIN	GOTONG	33018312337	SBIN0007385	25,000.00
540	SMT BINA GOHAIN	KESHOB GOHAIN	GOTONG	32390010469	SBIN0007385	25,000.00
541	SRI PABITRA MOHAN	JATIN MOHAN	GOTONG	32457443082	SBIN0007385	25,000.00
542	SRI RAJAN MOHAN	LT KADAM PHUKAN	GOTONG	30418741396	SBIN0007385	25,000.00
543	SRI HURANJIT GOHAIN	KHUDUPI GOHAIN	GOTONG	50368112375	ALLA0213066	25,000.00
544	SMT NIKHAMONI MORAN GOGOI	LAKHINDER GOGOI	GOTONG	7370010021569	SYNO007370	25,000.00
545	SRI NIREN BARUAH	BULEN BARUAH	GOTONG	11789909539	SBIN0007385	25,000.00
546	SRI MAHESH HATI BARUAH	KAMAL HATIBARUAH	GOTONG	1224010105423	UTBI0BRNG84	25,000.00
547	SRI HIRAKYOTTI PHUKAN	BIJOY PHUKAN	GOTONG	34004650328	SBIN0007385	25,000.00
548	SMT DIPAMONI KHANIKAR	RAMANANDA KHANIKAR	GOTONG	1152101020279	SBIN0007386	25,000.00
549	SMT MINOTI PHUKAN	AMULYA PHUKAN	GOTONG	35349443302	SBIN0007387	25,000.00
550	SRI GONITA KHANIKAR	KUSUMBAR KHANIKAR	GOTONG	31816953627	SBIN0007385	25,000.00
551	SMT TUNAKI NAGBANSHI	BID NAGBANSHI	GOTONG	54701000013817	IOBA0000547	25,000.00
552	HARUKAN GOGOI	BIMAL GOGOI	GOTONG	383202120001572	UBIN0538329	25,000.00
553	SRI JITEN PHUKAN	NANDESWAR PHUKAN	GOTONG	122401080177	UTBI0BRNG84	25,000.00
554	SRI PANKAJ GOGOI	NUMOL GOGOI	GOTONG	3739115762	CBIN0281286	25,000.00
555	SRI MANORANJAN KHANIKAR	DEBESWAR KHANIKAR	GOTONG	20241456378	SBIN0000196	25,000.00
556	SRI JYOTIISH HATIBARUAH	PHULEN HATIBARUAH	GOTONG	1152108017213	CNRB0001152	25,000.00
557	SMT PRANATI GOGOI	BHUGRAM GOGOI	GOTONG	1122104000049740	TBKL0001122	25,000.00
558	SRI SANJIB DUWARAH	LAKHAN DUARAH	GOTONG	34325634721	SBIN0007385	25,000.00
559	SRI SUNU GHARPHALIYA	PREM GHARPHALIYA	GOTONG	36512451548	SBIN0007386	25,000.00
560	HADHAN DUTTA	NIMILA DUTTA	GOTONG	7154010004511	UTBI0RBBAGB	25,000.00

561	SRI HUKHEN GOGOI	RUPAMONI GOGOI	GOTONG	30710219	SBIN0000196	25,000.00
562	SMT KANAKLATA HATIBARUAH	JADAB HATIBARUAH	GOTONG	1224010202152	UBIN0538329	25,000.00
563	BHUPEN CHETIA	NAREN CHETIA	GOTONG	34401809978	SBIN0000196	25,000.00
564	PURNIMA HATIBARUAH	HEMANITA HATIBARUAH	GOTONG	11789910679	SBIN0007385	25,000.00
565	ROBIN GOGOI	HARINATH GOGOI	GOTONG	71540100008937	UTBIORRBAGB	25,000.00
566	SMT ANIKHA PHUKAN	ASHYOT PHUKAN	GOTONG	11789918646	SBIN0007385	25,000.00
567	SURABHI PATAR	BUBUL PATAR	GOTONG	1224010166881	UTBIORRNG84	25,000.00
568	LALITA PATAR	HEMCHANDRA PATOR	GOTONG	50190001493179	NESF0000085	25,000.00
569	PADMESWAR PATAR	CHANDIDDHAR PATOR	GOTONG	30795328840	SBIN0007385	25,000.00
570	ANIL GHARPHALIYA	PREM GHARPHALIYA	GOTONG	34365258181	SBIN0007386	25,000.00
571	NIZARA KHANIKAR	AKON KHANIKAR	GOTONG	122401080139	UTBIORRNG84	25,000.00
572	SMT NEPET GOGOI	MAIMON GOGOI	GOTONG	11789920712	SBIN0007385	25,000.00
573	SMT SUNITA NAG	KARTIK NAG	GOTONG	1224010376846	UTBIORRNG84	25,000.00
574	SMT RENU GOGOI	HORES WAS GOGOI	GOTONG	33181797230	SBIN0007385	25,000.00
575	JABA NAGBANSHI	NIGRA NAGBANSHI	GOTONG	1224010374644	UTBIORRNG84	25,000.00
576	TORALI GOGOI	RAJANI KANTA GOGOI	GOTONG	52200000061947	NESF0000085	25,000.00
577	NULAPI GOGOI	AMIT GOGOI	GOTONG	1224010332830	UTBIORRNG84	25,000.00
578	SRI PRAFULLA GOGOI	LT KAMAL GOGOI	GOTONG	7154010005495	UTBIORRBAGB	25,000.00
579	PARISHMITAGOGOI	DEBOKANTA GOGOI	GOTONG	1152101019059	CNRB0001152	25,000.00
580	SMT PRANATI HATIBARUAH	BIJU HATIBARUAH	GOTONG	122401066843	UTBIORRNG84	25,000.00
581	SRI SAILEN BARUAH	LT GULEN BARUAH	GOTONG	11789912112	SBIN0007385	25,000.00
582	SRI MONO GOGOI	LT MAHIRAM GOGOI	GOTONG	7154010005485	UTBIORRBAGB	25,000.00
583	SMT MIRIDULA GOGOI	MUNIN GOGOI	GOTONG	1224010177979	UTBIORRNG84	25,000.00
584	RITAMONI GHARPHALIYA	RAJAT GHARPHALIYA	GOTONG	31887255256	SBIN0007385	25,000.00
585	MR M/HINDRA GOGOI	JUGARAM GOGOI	GOTONG	33062927675	SBIN0007385	25,000.00
586	SMT HUNMAL GOGOI	LT AKON PATOR	GOTONG	1224010166874	UTBIORRNG84	25,000.00
587	TATHYAJIT BORUAH	GHANEN BARUAH	GOTONG	50449965229	ALLA0210463	25,000.00
588	MOUSUMI GOGOI	DULAL GOGOI	GOTONG	1224010177993	UTBIORRNG84	25,000.00

589	BHUGESWAR GOGOI	LT MANDAJEET GOGOI	GOTONG	5-78897058	SBIN0007385	25,000.00
590	TUTUMONI GOGOI	BHALUKA GOGOI	GOTONG	1224010166737	UTBI0BRNG84	25,000.00
591	SRI BIPLOV HATIBARUAH	TULESWAR GOGOI	GOTONG	20188064233	SBIN0007385	25,000.00
592	SUSHIL HATIBARUAH	LUCHIT HATIBARUAH	GOTONG	88313998066	SBIN0007385	25,000.00
593	BINANDA HATIBARUAH	LT TANGKESWAR HATIBARUAH	GOTONG	3271441218	CBIN0281286	25,000.00
594	TULESWAR HATIBARUAH	LT TANGKESWAR HATIBARUAH	GOTONG	34284200424	SBIN0007385	25,000.00
595	PRAKASH HATIBARUAH	TULESWAR HATIBARUAH	GOTONG	1224010183345	UTBI0BRNG84	25,000.00
596	HIREN PATOR	AKON PATOR	GOTONG	1224010213356	UTBI0BRNG84	25,000.00
597	ANANDA HATIBARUAH	TANGKESWAR HATIBARUAH	GOTONG	10735179760	SBIN0000196	25,000.00
598	SHATI NAGBANSI	HERO NAGBANSI	GOTONG	54701000012292	IOBA0000547	25,000.00
599	BOBITA BIREN	DURGA NAGBANSI	GOTONG	54701000012288	IOBA0000547	25,000.00
600	JULI NAGBANSI	ROMAN NAGBANSI	GOTONG	54701000012290	IOBA0000547	25,000.00
601	SMT MONIKA RANJIT	ADHIN NAGBANSI	GOTONG	54701000012285	IOBA0000547	25,000.00
602	SUJA GOGOI	PRASANTA GOGOI	GOTONG	4041744919	CBIN0281286	25,000.00
603	ASHA CHAURA	SANTOSH CHAURA	GOTONG	7155010075174	UTBI0RRBAGB	25,000.00
604	ASHA NAGBANSI	RATKA NAGBANSI	GOTONG	054701000012614	IOBA0000547	25,000.00
605	BHENDI NAGBANSI	CHUNU NAGBANSI	GOTONG	7155010075183	UTBI0RRBAGB	25,000.00
606	PINKEY NAGBANSI	KHESEBA NAGBANSI	GOTONG	054701000013510	IOBA0000574	25,000.00
607	BHADRA HATI BARUAH	HEMANTA HATIBARUAH	GOTONG	37671073299	SBIN0007385	25,000.00
608	BANDITA GHARPHALIA	CHANDRA JYOTI GHARPHALIA	GOTONG	7154010075998	UTBI0RRBAGB	25,000.00
609	MOHAN NAGBANSI	RAKSHA NAGBANSI	GOTONG	1224010312172	UTBI0BRNG84	25,000.00
610	NANDESWAR PHUKAN	BIDYADHAR PHUKAN	GOTONG	11789920326	SBIN0007385	25,000.00
611	BONDHAN PROJA	ASHUK PROJA	GOTONG	1224010335720	UTBI0BRNG84	25,000.00
612	DROWPODI	BIBHU PROJA	GOTONG	1224010230032	UTBI0BRNG84	25,000.00
613	LUTPATI NAGBANSI	BHANDA NAGBANSI	GOTONG	1224010311533	UTBI0BRNG84	25,000.00

614	PALLAB GOGOI	GIRISH GOGOI	GOTONG	72323887	SBIN0000196	25,000.00
615	PADMAJYOTI GOHAIN	MRIDUL GOHAIN	GOTONG	50445080614	ALLA0213482	25,000.00
616	BARUAKANTA GOGOI	KHIRUD GOGOI	GOTONG	1224010177894	UTBI08RNG84	25,000.00
617	HUNKAN GOHAIN	HUNAK GOHAIN	GOTONG	50471506697	ALLA0211124	25,000.00
618	DEEP SAIKIA	BIPIN SAIKIA	NATUN RONGAGORA GAON	20026949813	SBIN0007385	25,000.00
619	JONEY SAIKIA	BIPIN SAIKIA	NATUN RONGAGORA GAON	06712010018880	ORBC0100671	25,000.00
620	BHADESWARI BORGOHAIN	NANESWAR BORGOGAIN	NATUN RONGAGORA GAON	30380637496	SBIN0007385	25,000.00
621	RUBUL GOGOI	ASHINI GOGOI	NATUN RONGAGORA GAON	30468965408	SBIN0007385	25,000.00
622	NIRVA GHAR FLALLIA	BOTHA GHAR FLALLIA	NATUN RONGAGORA GAON	11789920803	SBIN0007385	25,000.00
623	MALAKA BORGOHAIN	ROGAI BORGOHAIN	NATUN RONGAGORA GAON	11789920188	SBIN0007385	25,000.00
624	KHAGESWAR SENAPATI	LANKESWAR SENAPATI	NATUN RONGAGORA GAON	32260403324	SBIN0007385	25,000.00
625	LAKHI GOGOI	BHUGRAM GOGOI	NATUN RONGAGORA GAON	1224010178389	UTBI0BRNG84	25,000.00
626	JURALI TANTI	AKAS KARMAKAR	NATUN RONGAGORA GAON	54701000012310	IOBA0000547	25,000.00

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627	NIRANTA GOHAIN	BHUGAR GOHAIN	NATUN RONGAGORA GAON	50190011039799	BD810001506	25,000.00
628	SURAJ HATIBARUAH	KAMAL HATIBARUAH	NATUN RONGAGORA GAON	3196011664	CBIN0283206	25,000.00
629	PUSPA BARUAH	LT HIREN BARUAH	NATUN RONGAGORA GAON	383202120000881	UBIN0538329	25,000.00
630	UMANTA SONOWAL	KESHAB SONOWAL	NATUN RONGAGORA GAON	1224010178938	UTBI0BRNG84	25,000.00
Total Amount Rs.						1,57,50,000.00

No Bank details

SL. NO	NAME OF BENEFICIARY	GUARDIAN NAME	VILLAGE	A/C NO.	IFSC CODE	REMARKS
1	SUTLAL GARH	LT. HAGRU GARH	NATUN RONGAGORA GAON	A/F	NIL	
2	PANDU PROJA	JOYLAL PROJA	NATUN RONGAGORA GAON	A/F	NIL	
3	SUNIL SARKAR	LT. RISHAN SARKAR	GOTONG	A/F	NIL	
4	SAURAV GOGOI	PHULESHWAR GOGOI	GOTONG	A/F	NIL	
5	ASSAM NAGBANSHI	LT BIREN	GOTONG	A/F	NIL	
6	DURGA NAGBANSHI	LT. MADAN	GOTONG	A/F	NIL	
7	PETU NAGBANSHI	ASSAM NAGBANSHI	GOTONG	A/F	NIL	

8No. Line Catholic Church Relief Camp 72 Nos.

Sl. NO	NAME OF THE PERSONS	NAME OF THE GUARDIANS	NAME OF THE BANK	IFSC CODE	ACCOUNT NO.	Amount to be transferred (in Rs.)
1	BINITA KANDROO	KANDROO PROJA	UBI	UTBIODOD316	0015010700948	25,000.00
2	ANAMIKA LAKRA	KARNALICH LAKRA	UBI	UTBIODOD316	0015010545129	25,000.00
3	SUREN BHUMIJ	SUKU BHUMIJ	UBI	UTIOTIKG88	1256010317818	25,000.00
4	MAMONI TANTI	ROMEN BHUMIJ	UBI	UTBIODOD316	0015010995238	25,000.00
5	MEERA SULEMAN	LATE GURU	UBI	UTIOTIKG88	1256010332828	25,000.00
6	MIKHEL SIBESH	SIBESH JAKRIASH	UBI	UTIOTIKG88	1256010342629	25,000.00
7	DEBINA YAKOUB	BUNIFASH TIRKEY	UBI	UTBIODOD316	0015010736237	25,000.00
8	PROMILA MONSAI	MONSAI	UBI	UTBIODOD316	0015010750950	25,000.00
9	DURGAMONI RAMLAL	LATE. RAMO	UBI	UTIOTIKG88	1256010333306	25,000.00
10	PARDEEP RAVI	LATE. THIBU TANTI	UBI	UTBIODOD316	0015010372749	25,000.00
11	LAKHIMONI NAGBONSHI	(LATE KUNDON) GANGARAM MURA	UBI	UTBIODOD316	0015010548908	25,000.00
12	PHULMOTIA KANDRO	LATE. KUNDRO	UBI	UTBIODOD316	0015010708630	25,000.00
13	ETUWARI GONO	LATE. GONO	UBI	UTBIODOD316	0015010637572	25,000.00
14	SOMARI SUREN	SUREN	UBI	UTBIODOD316	0015010637693	25,000.00
15	MEENA KARLOOS	BIJOY	UBI	UTBIODOD316	0015010842303	25,000.00
16	SUMITRA MONESWAR	MONESWAR	UBI	UTIOTIKG88	1256010331913	25,000.00
17	SIBRIYA KASTAN	LATE. KASTAN LAKRA	UBI	UTBIODOD316	0015010703773	25,000.00
18	JOIMONI BASO	BASOO PROJA	UBI	UTIOTIKG88	1256010332767	25,000.00
19	SUNITA GUSAI	DGAUTAM TANTI	UBI	UTBIODOD316	0015010759502	25,000.00
20	CHANMONI KRISHNO	LATE. KRISHNO PROJA	UBI	UTBIODOD316	0015010530927	25,000.00
21	MEENA SIDAM	SIDAM MURAH	UBI	UTIOTIKG88	1256010332781	25,000.00
22	MERRY ALBERT	YAKUB TIRKEY	UBI	UTBIODOD316	0015010654685	25,000.00
23	LOLITA PHILIP	PHILIP SORENG	UBI	UTBIODOD316	0015010708593	25,000.00
24	SEROPINA MINJ	SAIRNUESH MING	UBI	UTBIODOD316	0015010706209	25,000.00
25	JULITA KHALKO	LATE. ROBERT	ACVB	UTBIORRABGB	7156010096326	25,000.00
26	JASINTA FRANCIS	MANSAI	UBI	UTIOTIKG88	1256010347839	25,000.00

27	MONJI ASHOK	ASHOK BHUMIJ	AGVB	UTBIORRBAGB	7156010096797	25,000.00
28	AGOSTINA BAITULOM	LT. ROHIT	UBI	UTTIOTIKG88	1256010338981	25,000.00
29	KAMLEE BASU	LATE. RAJESH	UBI	UTTIOTIKG88	1256010333634	25,000.00
30	PARBOTTI PUDAL	{DOMNICK KUJUR} PUDAL	UBI	UTTIOTIKG88	1256010347587	25,000.00
31	RUMA LAKRA	JEREL LAKRA	UBI	UTBIODD316	0015010819725	25,000.00
32	CHILABINA SURAJ	UILIYAM	UBI	UTBIODD316	0015010449904	25,000.00
33	ABHINASH KHESH	NIKODIN	UBI	UTBIODD316	0015010818278	25,000.00
34	TILOK URANG	SUKUL	UBI	UTBIODD316	0015010982481	25,000.00
35	SHUAM RANJAN	RANJAN	UBI	UTBIODD316	0015010706827	25,000.00
36	MOSUKAN KURMI	SHIV KURMI	UBI	UTBIODD316	0015010578523	25,000.00
37	AJOY PROJA	LATE. MINTU	SBI	SBIN0003835	37094485072	25,000.00
38	AKSHAY PROJA	LATE MINTU	UBI	UTBIODD316	0015010995399	25,000.00
39	SUNITA MITHUN	MITHUN PROJA	UBI	UTBIODD316	0015010704069	25,000.00
40	BIROSMONI SIBESH	JAKRIASH	UBI	UTBIODD316	0015010700900	25,000.00
41	ASONTI DEBARO	DEBARO TANTY	UBI	UTBIODD316	0015010704113	25,000.00
42	SUKHMOTTI MOTTILAL	MOTTILAL	UBI	UTTIOTIKG88	1256010347730	25,000.00
43	BAITULAM BERNA	JAKRIASH	UBI	UTBIODD316	0015010880978	25,000.00
44	DEEP SUMITRA	RAJU	UBI	UTBIODD316	0015010769952	25,000.00
45	MALOTI DUKHU	KANDRO PROJA	UBI	UTTIOTIKG88	1256010341530	25,000.00
46	RAJU SUKRA	SUKRA BHUMIJ	UBI	UTTIOTIKG88	1256010342995	25,000.00
47	SONJITA JOSEPH	DOMNICK SORENG	UBI	UTBIODD316	0015010712798	25,000.00
48	BIJOY KARMOKAR	FRANCIS	SBI	SBIN0003835	36855121540	25,000.00
49	RAKHI SURESH	SURESH PROJA	UBI	UTBIODD316	0015010700375	25,000.00
50	TULSI BITEN	PRODEEP TANTI	UBI	UTBIODD316	0015010700955	25,000.00
51	MEERA KORUA	JOGOT	SBI	SBIN0003835	33232411059	25,000.00
52	ANTHONI BAITULAM	BAITULOM SORENG	UBI	UTBIODD316	0015010770590	25,000.00
53	RONI BHUYAN	RAMBALOK	AGVB	UTBIORRBAGB	7156010105842	25,000.00
54	RUPAM GOGOI	KHIRUD	AGVB	UTBIORRBAGB	7156010066945	25,000.00
55	NICKODIN KHESH	PAULUSH KHESH	AGVB	UTBIORRBAGB	7156010004378	25,000.00
56	RANJITA TELI	RAMU TELI	AGVB	UTBIORRBAGB	4156010110464	25,000.00
57	ASHA KISHAN	KIRON MURA	UBI	UTBIODD316	0015010759533	25,000.00
58	MALATI TURI	RAJIV TURI	UBI	UTBIODD316	0015010451604	25,000.00

59	RUKMONI TANTI	LATE KANTESOR	UBI	UTBIODOD316	0015010535403	25,000.00
60	GARATI MORAN	ROBINDRA	AGVB	UTBIORRBAGB	7156010092144	25,000.00
61	NIPEN NARAYAN	NARAYAN TANTI	UBI	UTBIODOD316	0015010815093	25,000.00
62	MONIKA AJOY	RAMU NAGBONSHI	UBI	UTIOTIKG88	1256010312233	25,000.00
63	KALPANA TIGGA	LATE JOHN	SBI	SBIN0003835	38526223757	25,000.00
64	BASAN KISHAN	LATE BANTHOO	AGVB	UTBIORRBAGB	7156010060604	25,000.00
Total Amount Rs.						16,00,000.00

No Bank Details

61	MAHINDRA PORJA					
62	SONJA GORH	MORU GORH				
63	SUKMOTI	LOKHIMONI				
64	KHERUWAR	LAXMAN PATOR				
65	JULINA PATOR	MONGAL PORJA				
68	BIJOY BHUMIJ	RAJESH				
69	GEETA PORJA	DEEPOK				
70	SALONTI LAKRA	PITAR				

APPENDIX I

Reference List
Chapter 3

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Item Nos. 03 & 13

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

I.A. No. 30/2020

(For modification/recall of order dated 24.6.2020)

IN

Original Application No. 43/2020(EZ)

Bonani Kakkar

Applicant(s)

Versus

Oil India Limited & Ors.

Respondent(s)

AND

I.A. No. 31/2020

(For modification/recall of order dated 24.6.2020)

IN

Original Application No. 44/2020(EZ)

Wildlife and Environment
Conservation Organisation

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 02.07.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER**

Mr. Mukul Rohatgi, Senior Advocate with Mr. Parthive K.
Goswami and Mr. Rahul Pratap, Advocates for OIL – Applicant in IAs –
original respondent in the OAs

Mr. Siddhartha Mitra, Senior Advocate with Ms. Shruti Agarwal,
Advocate – for original applicants – opposite parties in IAs

ORDER

1. This order will dispose of I.A. No. 30/2020 in O.A. No. 43/2020 (EZ) and I.A. No. 31/2020 in O.A. No. 44/2020(EZ) as both the

applications are same for all purposes, seeking modification/recall of common order passed by this Tribunal on 24.6.2020 in two original applications filed on same issue.

2. The issue pertains to claim for compensation to the victims and to the environment on account of damage in an incident of oil well blow out on 27.05.2020 at Baghjan in the Tinsukia District of Assam and other consequential events that followed. Case of the applicants is that Baghjan Oil well set up by the Oil India Limited (OIL) released **propane, methane, propylene** and other gases causing damage to bamboo groves, tea gardens, banana trees and betel nut trees in the area and also spread into the Dibru-Saikhowa National Park which, according to the Applicant, records over 40 mammals, 500 species of birds, 104 fish species, 105 butterfly species and 680 types of plants including a wide variety of rare orchids. The area harbours tiger, elephant, wild buffalo, leopard, hoolock gibbon, capped langur, slow loris, Gangetic dolphin, besides critically endangered bird species such as the Bengal Florican, White Winged Duck, Greater Adjutant stork, White rumped vulture, slender billed vulture as well as the rare and endemic Black-breasted parrotbill. The oil also spilled into the Dibru river causing a film of oil in the river that passes through the Maguri-Motapung wetlands, an Important Bird and Biodiversity Area, and along the Dibru Saikhowa National Park. The Maguri-Motapung Wetland, located less than 10 km from Dibru-Saikhowa National Park, is a part of the Dibru-Saikhowa Biosphere Reserve (DSBR) and hosts some of the most vulnerable species of birds such as Swamp Francolin, Marsh Babbler, Greater Adjutant and Pallas's Fish-eagle, Red-headed Vulture and White-bellied Heron, and over 80 species of fish. River Dibru is a tributary of River Lohit which then forms river Brahmaputra in the lower reaches. Brahmaputra river

system is also a home to Gangetic dolphins. As a result of the blow-out, there was also a fire on 09.06.2020. The applicant has also stated that the blow-out has left behind huge volumes of residue as gas condensate which is a mixture of chemical compounds that are toxic for land and vegetation and is a known carcinogen. The blowout is not only hazardous to the health of the people but also severely affect their livelihood whose occupation is mainly agriculture, fishing and animal rearing. **1610 families were displaced as a result of the gas leak.**

3. This Tribunal, vide order dated 24.06.2020, considered the material placed on record by the applicants in two cases being OA 43/2020(EZ) and OA 44/2020(EZ) and issued notice. The Tribunal also constituted an Expert Committee headed by a former Judge of the Gauhati High Court with seven other members as follows:

- | | | | |
|---|---|---|----------|
| 1 | Hon'ble Mr. Justice B.P. Katakey, former Judge of the Gauhati High Court. | : | Chairman |
| 2 | Member Secretary, Central Pollution Control Board (Online, if travel is restricted due to Covid-19) | : | Member |
| 3 | A senior expert from Council of Scientific and Industrial Research (CSIR) (Online, if travel is restricted due to Covid-19) | : | Member |
| 4 | Dr. Sarbeswar Kalita, Professor and Head of the Department of Environment Science, Guwahati University | : | Member |
| 5 | Shri. Abhay Kumar Johari, IFS (retired), Former Member Biodiversity Board | : | Member |
| 6 | Shri Ajit Hazarika, Ex-Chairman, ONGCL | : | Member |
| 7 | Member Secretary/Senior Scientist, Assam State Pollution Control Board | | |
| 8 | District Magistrate, Tinsukia District, Assam | : | Member |

The Committee is also granted liberty to co-opt as member or seek opinion from any other expert/ experts or institution/institutions including Wildlife Institute of India (WII), Dehradun, if felt necessary. The terms of reference on which the Committee is to give a report are:

- i. Cause of gas and oil leak;
- ii. Extent of loss and damage caused to human life, wildlife, environment;
- iii. Damage and health hazard caused to the public;
- iv. Whether any contamination has been caused to water, air and soil of the area of the oil well and its vicinity;
- v. Extent of contamination of water of the Dibru river due to the oil spill;
- vi. For the purpose of (iv) and (v) above, it may be necessary to get the air quality monitored and, samples of soil and ground water of the area as well as the water of river Dibru downstream of the oil spill tested;
- vii. Impact on the eco sensitive zone of the Dibru-Saikhowa National Park and Maguri-Motapung Wetland;
- viii. Impact on agriculture, Fishery and domestic animals in the area;
- ix. Whether there were any mitigation measure put in place by OIL to offset the incidents such as the one in question;
- x. Persons responsible for the fire incidents and the cause of failure to prevent the incident;
- xi. Assessment of compensation for the victims and cost of restitution of the damage caused to property and the environment;
- xii. Preventive and remedial measures;

xiii. Any other incidental or allied issues.

The Committee is also to dwell on the action taken thus far either by the Government or by the OIL or by any other agency and the expenditure incurred towards mitigation. Opportunity is also to be provided to the Respondent OIL to give its views and submissions.

The Tribunal also directed deposit of an interim amount of Rs. 25 crores to meet the cost of remediation of the damage to the environment, biodiversity, human, wildlife and public health subject to final assessment.

4. We have heard Shri Mukul Rohatgi, learned Senior Counsel appearing for OIL in support of the applications filed by the OIL for modification/recall of the order dated 24.06.2020 which have been opposed by the Original Applicants represented by Shri Mitra, Senior Advocate.

5. It is submitted by Shri Rohtagi that the order passed by this Tribunal did not take into account the fact that on the same issue proceedings have been taken before the Gauhati High Court. The Central as well as State Governments have ordered enquiries. The Tribunal also did not take into the fact that the company itself has taken several measures for rehabilitation of the displaced families by setting up relief camps and providing food and other facilities. **The OIL has also deposited a sum of Rs. 4.83 crores with the District Magistrate, Tinsukia District as an interim relief for the affected families as per directions of the District Magistrate. The OIL has also set apart a budget of more than Rs. 130 crores towards operation cost in controlling the blow-out at Baghjan.** It has also hired international experts for remediation for the damage caused on account of the blow-

out and is undertaking requisite remediation and rehabilitation works. He submitted that the Committee is unnecessary and so is the direction to deposit the amount of Rs.25 crore with the District Magistrate as the **OIL is public Sector undertaking committed to compensate the victims and restitute the environment. It will pay whatever amount required on its liability being ascertained, apart from voluntary steps already taken.**

6. We do not find any ground for recall of the impugned order but are inclined to modify it with regard to immediate deposit of Rs.25 crore in view of the discussion as shall follow. Even though the order was passed *ex-parte*, the basis of the order remains even after considering the present IAs and after hearing learned senior counsel. Incident and damage remain largely undisputed. The Committee has been asked to undertake site visit and compile relevant information necessary for adjudication of the issue falling within the jurisdiction of this Tribunal under sections 14 and 15 of the NGT Act read with section 20. The Committee is also to consider the viewpoint of the OIL which would include steps already taken or planned for rehabilitation of the victims and restitution of the environment. Other enquiries are not a substitute for the information sought to be gathered by this Tribunal for exercise of its jurisdiction which is *sui generis* as laid down in Bhopal Gas Peedith Mahila Udyog Sangathan case (2012) 8 SCC 326 and Meghalaya Mining case, (2019) 8 SCC 177. Other enquiries are perhaps for discharge of functions of State and Central Govt under different statutes. Proceedings before High Court may involve several issues while this Tribunal is mandated by the statute to perform its functions within the four corners of its jurisdiction. Actions initiated by the company are in discharge of its duties but the same does not end jurisdiction of this Tribunal. Under

the law, liability for compensation of occupier undertaking hazardous activity is absolute in view of MC Mehta v UOI, (1987) 1 SCC 395. Further, liability of the Occupier as well as concerned the regulatory authorities of the State and Central govt has to be undergone under the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. In these circumstances, recall of order constituting Committee to compile all relevant facts and data in a transparent and fair manner is not called for. Doing so will be failure of the Tribunal to exercise its jurisdiction. All steps taken by the OIL can also be looked into by the Committee in the course of its recommendations.

7. We may refer to a recent order of this Tribunal dealing with another tragedy on account of toxic gas leak at Vizag being order dated 2.6. 2019 in OA 73/2020 In re: LG Polymer Chemical Plant wherein similar pleas of a company were rejected. **It was observed that safety of citizens and the environment are of great concern calling for strict action for failure at all levels and strengthening the regulatory mechanism.** While the State must take action against its erring authorities for such failure, MoEF&CC must review its monitoring mechanism, criminal or other administrative issue may be gone into in any other proceedings, adjudication of liability of the company with regard to compensation by this Tribunal is not debarred. The Tribunal direct the State and Central Govts to perform their duties as per 1989 and 1996 Rules and other provisions. Operative part of some of the directions in the said case is:

“Restoration plan may be prepared by a Committee comprising two representatives each of MoEF&CC, CPCB and three representatives of State Government to be named by the Chief Secretary, including the

District Magistrate, Vishakhapatnam and such other concerned Departments within two months from today. MoEF&CC will be the nodal agency for the purpose.

Final quantification of compensation may be assessed by a Committee comprising representatives of MoEF&CC, CPCB and NEERI. The said Committee will be at liberty to associate/co-opt any other expert institution or individual. The Secretary, MoEF&CC may ensure constitution of such Committee within two weeks from today. The Committee may give its report within two months thereafter. MoEF&CC will be the nodal agency for the purpose.

The Chief Secretary, Andhra Pradesh may identify and take appropriate action against persons responsible for failure of law in permitting the Company to operate without statutory clearances within two months and give a report to this Tribunal

The MoEF&CC may also constitute an Expert Committee to suggest ways and means to revamp monitoring mechanism to check and prevent violation of environmental norms and preventing any such recurrence in future in any of the establishments dealing with hazardous chemicals. A special drive may be initiated in this regard. An action taken report may be furnished within three months from today.”

8. We may now consider the prayer for deferment of the direction to deposit a sum of Rs.25 crore with the Distt. Magistrate to meet the liability for compensation to the victims and the cost of restoration of the environment. Shri Rohtagi has stated that some amount has been deposited with the Distt. Magistrate but, it is not clear whether the amount has been disbursed or not and what the disbursement plan for relief to the victims is, apart from shelter and food which are said to have been provided. The Committee has been requested to suggest the amount of compensation which will include suggesting disbursement and restoration plan. The OIL is stated to have set apart more than Rs.25 crore and Shri Rohtagi also categorically assures that OIL being a public sector undertaking, there will be no difficulty in promptly making available whatever amount required for discharge of its liability. In view of this assurance, we defer our direction for deposit of Rs. 25 crore till the actual amount and its disbursement plan are worked out in the light

of the report of the Committee after considering viewpoint of victims as well as the OIL. However, adequacy of steps taken by OIL will have to be looked into by the Committee and then by this Tribunal following due process of law.

9. Accordingly, the applications including I.A. No. 32/2020 which is formal stand disposed of in the above terms. The Chief Secretary, Assam may give action taken report with regard to the liability of the concerned officers of the State and MoEF&CC may also consider this incident in its report to be filed in OA 73/2020 relating to revamping of regulatory framework and strategies to ensure that such incidents do not occur to prevent harm to public health and environment and to ensure further safety norms and safeguards.

List for further consideration on the date already fixed i.e. 29.07.2020.

A copy of this order be sent to the Chief Secretary, Assam, Secretary MoEF&CC, Justice Katakey and other members of the Committee by email.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Satyawan Singh Garbyal, EM

July 2, 2020
I.A. Nos. 30 & 32/2020
In OA 43/2020 with
IA 31/2020 in OA 44/2020
DV