

PEMS

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Her Kitchen

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She sits and she turns; front and back;
She's clean as she cooks and enters 'her' kitchen;
She washed and mops 'her' piece of kitchen land,
With all those 'lafu nura' she wipes round and again;
Dark and cool; neat and tidy; small and single space;
Sunlight lit through small window above her head;
Her kitchen mesmerizing with all richness;
Lights and heats; *meitans* and warmth so cozy;
She looks as graceful as she enters her kitchen;
Her 'phanek' up held high her breast,
No sandals approaching; softly touching her kitchen land;
She asks 'what do you want to eat?'
'What should I cook for you?'
As she matches fire she *Phoo phoo phoos, phoo and foos*.
Muddy *Leirang*, twigs' bundles and woods;
Locating in the middle of 'her' room, small and dark;
She cooks for self and she smiles without sins;
With no gas stoves, tools and tables, gas cylinder and cookers;
'Her' *chafus*, *Uyans* all in old and new use,
All in an imbalance position, she still works on,
Spoons and *khabeis*; *chegap* and no gas lighter;
Cups and plates; *pukhams* and *tengkots* and mugs;
All in spreading, all in one in one standing;
Found spreading all around 'Her' reaching all by her hand;
She cooks and she boils; she keeps and she covers;
She sits down and she stands up again and all;
As she walks and she speaks; her hands so engaged;
She lights her *leirang* and she matches now and again;
As though she starts now and again, all with blows;
Phoo phoo phoos phoo phoo and foos.

She boils and she rotates and she let it down;
'Her' body's bending and 'her' knees up to her chin;
Ah! She's beautiful at her own; she's goddesses of life;
She owns 'thum *chafus*, *morok kaouta*, *ngari utong*,
Machu utong, *nga yaiba utong*, *one to two tilhou*,
Bit of maroi napakpi, *few maroi napakpiss*, *slices of drid heiribok*,
Few gingers, *heijang thang*, all small and all small,
Uchan and *samuk*; she adore on her wooden *phan*;
Spreading her hands, right and left turning in and out;
Reaching all her essentials 'thum *chafus*' and cooking;
Happy as she is burden to none; she rotates *chafus* now and again;
Her hands holding fire twigs now and again, all with blows;
Phoo phoo phoos phoo phoo and foos.

Name Changed

I, Army No. 15356556-F Rank HAV Name Md. Ramizuddin Father of Sheikh Mohd. Anwar a resident of Yairipok Singa, have Changed his Name from Sheikh Mohd. Anwar to Mohammad. Anwar Vide Affidavit date 10/09/2019 before the Oath Commissioner, Manipur at Thoubal
Sd/-
Md. Ramizuddin
8787573587

Name Changed

I, Army No. 15356556-F Rank HAV Name Md. Ramizuddin Father of Sheikh Md. Nawash Sarif a resident of Yairipok Singa, have Changed his Name from Sheikh Md. Nawash Sarif to Sm Aziz Vide Affidavit date 10/09/2019 before the Oath Commissioner, Manipur at Thoubal
Sd/-
Md. Ramizuddin
8787573587

Name Changed

I, Army No 15356556-F Rank Hav name Md. Ramizuddin Father of Rita Begum, a resident of Yairipok Singa have changed her name from Rita Begum to SM Sajida Shani vide Affidavit date 10/09/2019 before the Oath Commissioner Manipur at Thoubal
Sd/-
Md. Ramizuddin
8787573587

Name Changed

I, Army No. 15356556-F Rank HAV Name Md. Ramizuddin Father of Sheikh Hassina, a resident of Yairipok Singa, have Changed her Name from Sheikh Hassina to **Sheikh Hassina** Vide Affidavit date 10/09/2019 before the Oath Commissioner, Manipur at Thoubal
Sd/-
Md. Ramizuddin
8787573587

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World Ozone Day and Langban Tarpan

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People belonging to the Meitei community across Manipur and beyond remembered their departed souls of the forefathers and ancestor on the occasion of Langban Heitha-Leitha or Tarpan. On the next day of full moon of Langbantha, the month of September is the start of Tarpantha that will last for the next fifteen days when we offer our floral tribute to the forefathers and ancestors. Someway observe in bigger way as 'UsavKappa' or some as with a little drop of water ora leaf of tulsi but the eternal believes are the same. It is our belief that by offering virtuous to the God and the elderly men, the soul and spirit of the departed forefathers are pleased. If they are pleased and satisfied then they protect their children from the evils and bless them with boons. After aachintha, the lean months of June and July are over, the departed souls are always eager to know the livelihoods for their children on the earth. It is also our belief that during the Autumnal Equinox, i.e. the season of Tarpan, the sky is very clear and during this time the spirit and souls of the departed ancestors from their heavenly abode can see their descendants on the earth. Thus is the Tarpan of our cultural legacy. But during this 15 days long celebration, if we could plant tree each by each family for each of the departed souls every year then that would be the greatest offering. If so, then our state would be with full of trees and everywhere would be only greenery. If so happened, our departed forefathers would also be surely very happy because their descendants would be living in healthy and the economy of the state also would be boosted. It is said when we offer someone with some living status, then that is the greatest offering.

Today, the 16th September is the World Ozone Day. Like other environmental problems, ozone layer depletion is also considered to be a major environmental issue now. Unfortunately, manufacturing activities since the industrial revolution have caused a disturbance in the atmosphere and opened up ways for more UV rays to penetrate down to the earth's surface. This has caused a serious consequence and potentially it can get worse if we do not act responsibly. Due to ozone layer depletion, many unpredictable challenges have come up to all the biotic forms on the planet. Hence the world has stood up now to count the effects and remedies of ozone layer depletion. Ozone(O₃),

discovered by Christian Friedrich, a German chemist in 1840 is very rare in our atmosphere. At an average, in 10 millions of air molecules, there are about two millions of oxygen molecules and only three molecules are of ozone. Though very small in quantity, it plays a vital role in our atmosphere. It is also formed naturally in the atmosphere because of the energy from the Sun and at the time of lightning.

Ozone may be divided into the atmospheric ozone or ground ozone and the stratospheric ozone or Ozone layer. Though the ground ozone is very injurious to health, what we are discussing is the stratospheric ozone. **Stratospheric ozone or ozone layer-** Earth's atmosphere is divided into several layers. The lower region, known as troposphere extends upto 10 km from surface. Virtually, all the human activities occur in this region. The next layer is stratosphere extending from 10 km to 50 km. About 90% of the earth's ozone is found in this region with maximum concentration occurring at the height of about 23.5 Km. Ozone at this region is formed when oxygen molecules absorb ultraviolet photon from Sunlight and undergoes photolysis. These ozone molecules absorb ultraviolet rays of wavelength 310-280 nm, also known as UV-B, the most harmful radiation thereby preventing it from entering into the Earth's surface. But scientist predicted that UV-B radiation intensities are increasing by more than 15% since the 1970s.

Ozone layer depletion- Ozone layer depletion was first captured the attention of the world in the latter half of 1970 and it was confirmed from the satellite pictures in the mid-1980s during the Antarctic spring, September to November every year. But now the formations of these ozone holes have spread all over the globe. The cause of this ozone depletion is due to the increase in the level of free radicals of hydroxyl, nitrous oxides and other halocarbons. But the most important compound which shares about 80% of the stratospheric ozone depletion is the Chlorofluorocarbons (CFCs). CFCs are extensively used for Refrigeration, Air-conditioning, and Foam blowing agents, cleaning of the electronic components and as a solvent.

Other hydrocarbon compounds containing chlorine, fluorine and bromine which also causes ozone layer depletion that are coming out mainly from swimming pools, industrial plants, sea salts and volcanoes are easily break down within the troposphere by the natural processes like sunlight, wind and rain etc. But CFCs are so

stable that they cannot be broken down easily in the lower atmosphere except only when by exposure to strong ultraviolet ray reaching in the stratosphere. When CFCs break down, free chlorine atoms are released. These chlorine atoms are highly reactive than a single chlorine atom can destroy as many as 1 million ozone molecules. With this process, the ozone layer in the stratosphere is depleting day by day.

The Effects of Ozone layer depletion- The affect of ozone layer depletion lies with the harmful effects of ultraviolet ray (UV-ray). The Sun is UV-ray discovered by Johann Wilhelm Ritter, a German physicist during 1972. The source of almost all these UV-rays is from the Sun. Ozone layer acts as a blanket by absorbing these harmful UV-rays and they do not allow most of them to reach the earth's surface. Exposure to higher amounts of UV radiation could have serious impacts on humans, animals and plants. The challenges to human health include skin cancers, sunburns and premature aging of the skin, more cataracts, blindness and other eye diseases. Experts say, if not check the problem of ozone layer depletion, 20% of the world population may suffer from skin cancer in the next 50 years. White people have a 70 times greater incidence than Black people and a 10 times greater incidence than Latin and Asian peoples. UV radiation can damage several parts of the eye, including the lens, cornea, retina and conjunctiva. Cataracts cause 50% of the 17 million blindness in the world. A sustained 10% thinning of the ozone layer is expected to result in almost two million new cases of cataract every year. Ozone layer depletion and weakness in immunosuppression all the biotic forms is a hot issue of the present day.

Ozone layer depletion has also adverse impacts on agriculture, forestry and natural ecosystems. It can affect the important food crops by adversely affecting Cynobacteria which helps them to absorb and utilize nitrogen properly. World's major crop species are particularly vulnerable to increase in UV radiation, resulting in reduced growth, size, photosynthesis and flowering time. These species include wheat, rice, barley, oats, corn, soybeans, peas, tomatoes and almost all staple and cash crops. Small changes in leaf size may increase the ability of weeds to grow around some crops. Small changes in pollination time, resistance to insects or disease, or in the length of the growing season, could cause large changes in yield. The most likely thing to happen will be a change in the relative

population of various unwanted species (Runeckles and Krupa, 1994). It is really a challenge to our world food security.

Phytoplankton, an important component of marine food chain can also be affected by ozone layer depletion. These tiny photosynthesizing plants provide 50 percent of all the oxygen available on the Earth but UV-B ray causes genetic damages to these organisms. Coral Reefs that mankind termed them as the tropical forest of the ocean are also most affected by ozone layer depletion. Due to increase in UV-ray, our global biodiversity as a whole is intensively damaged thereby affecting all life forms.

UV-rays overexposure may cause eye and skin cancers to animals. But animals with fur are somewhat saved from UV-radiation. Species of marine animals in their developmental stage e.g. young fish, shrimp larvae and crab larvae are also widely threatened in recent years by the increased UV radiation under the Antarctic ozone hole.

Materials such as wood, plastic, rubber, fabrics, paints and many construction materials are degraded by UV radiation. The economic impact of ozone depletion on replacing and protecting materials could be significant.

Conclusion- The increasing concern over the causes and the effects of ozone layer depletion led to the observation of the "World Ozone Day" every year. It is an undisputed fact that if we stop use and the production of CFCs right now, then also, its problem will persist on the earth for the next one hundred years. But to reduce and control of the Industrial emission of CFCs, many countries have eventually agreed to discontinue the production of CFCs, halons, carbon tetrachloride and methyl chloroform etc. except for a few specific purposes. Now the industries also have started to develop with more ozone friendly substitutes. For the peoples of north eastern India including our state Manipur who are dwelling in the higher altitude and also nearer to the geographical tropic have the more vulnerability to the harmful effects of ozone layer depletion. As a part of observation of World Ozone Day, every one of us needs to take care of our Environment and the ozone layer right from this moment onwards. Therefore, as we are remembering our departed souls by observing the Tarpan during this Langbantha, if we again observe this day in a more meaningful way, then we can do something better for the future generation to hand over them with a clean and beautiful environment.

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WORLD OZONE DAY 2019:

Issues on protection of the ozone layer

Current ODS abundances in the atmosphere are known directly from air sample measurements. The initial step in the depletion of stratospheric ozone by human activities is the emission, at earth's surface, of gases containing chlorine and bromine. Most of these gases accumulate in the lower atmosphere because they are unreactive and do not dissolve readily in rain or snow. Natural air motions transport these accumulated gases to the stratosphere, where they are converted to more reactive gases. Some of these gases then participate in reactions that destroy ozone. Finally, when air returns to the lower atmosphere, these reactive chlorine and bromine gases are removed from earth's atmosphere by rain and snow. Impacts of ozone depletion: The ozone present in the stratosphere filters out most of the sun's potentially harmful shortwave ultraviolet (UV) radiation. If this ozone becomes depleted, then more UV rays will reach the earth. Exposure to higher amounts of UV radiation could have serious impacts on human beings, animals and plants. It can have serious implication to human health

causing more skin cancers, sunburns and premature aging of skin, more cataracts, blindness and other eye diseases. It weakens the human immune system. It also has adverse impact on agriculture, forestry and natural ecosystems. Several of the world's major crop species are particularly vulnerable to increased UV, resulting in reduced growth, photosynthesis and flowering. Only a few commercially important trees have been tested for UV (UV-B) sensitivity, but early results suggest that plant growth, especially in seedlings, is harmed by more intense UV radiation. Damage to marine life-in particular, plankton is threatened by increased UV radiation. Plankton are the first vital step in aquatic food chains; Decreases in plankton could disrupt the fresh and saltwater food chains, and further lead to a species shift; Loss of biodiversity in our oceans, rivers and lakes could reduce fish yields for commercial and fisheries. The efforts to protect the ozone layer and to combat climate change are mutually supportive. The most recent adjustments to the Montreal

Protocol, adopted in 2007, accelerate the phase out of hydrochlorofluorocarbons (HCFCs). The level of climate benefits that can be achieved depends on what chemicals and technologies replace HCFCs. Their phase out thus offers a unique opportunity to acquire cutting-edge technologies that not only eliminate ozone depleting chemicals, but also saves energy and maximises climate benefits. Although the substantial phase-out of HCFCs has only just begun, it is heartening to see that industry is applying the new alternative technologies. These technologies will not only eliminate damage to the ozone layer, but also reduce adverse effects on climate.

Conclusion: On this World Ozone Day, let us celebrate and reemphasise the greater necessities for protection of ozone layer. Ozone in the stratosphere absorbs a large part of the sun's biologically harmful ultraviolet radiation; stratospheric ozone is considered good ozone because of this beneficial role. In contrast, ozone formed at earth's surface in

excess of natural amounts is considered bad ozone because it is harmful to humans, plants, and animals. Natural ozone near the surface and in the lower atmosphere plays an important beneficial role in chemically removing pollutants from the atmosphere. So, the phase out of the controlled uses of the ozone depleting substances and related reductions has not only helped protect the ozone layer for this and also for future generations to come. It has also significantly contributed on global efforts to combat climate change and furthermore it has protected human health and ecosystems by limiting the harmful ultraviolet radiation from reaching the earth. Finally, we should continue our untrifling efforts for preservation of ozone layer for the betterment of our mother earth.

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