

PEMPHIS

49



Environmental Newsletter
Ministry of Environment and Energy



CONGESTION

MALE'

EDITOR'S NOTE

THIS EDITION OF PEMPHIS AIMS TO COVER CONGESTION AND ITS ASSOCIATED PROBLEMS IN MALE'. HAVING TO CATER HALF OF THE NATION'S POPULATION IN A CONCRETE JUNGLE WHICH FALLS SHORT TO CLAIM 2KM SQ. OF LAND AREA HAVE IMPACTED US IN MANY WAYS, BOTH DIRECT AND INDIRECT; RISING LAND VALUES, HEALTH ISSUES, ASSOCIATED SOCIAL PROBLEMS, EXHAUSTION OF AESTHETIC BEAUTY, ETC.

WE ARE DELIGHTED TO ADD A NEW SEGMENT "NOTES FROM THE MINISTER OF ENVIRONMENT AND ENERGY"; WITH GOD'S WILL, THROUGH THIS SEGMENT MINISTER WOULD ADDRESS OUR READERS ON EACH EDITION.

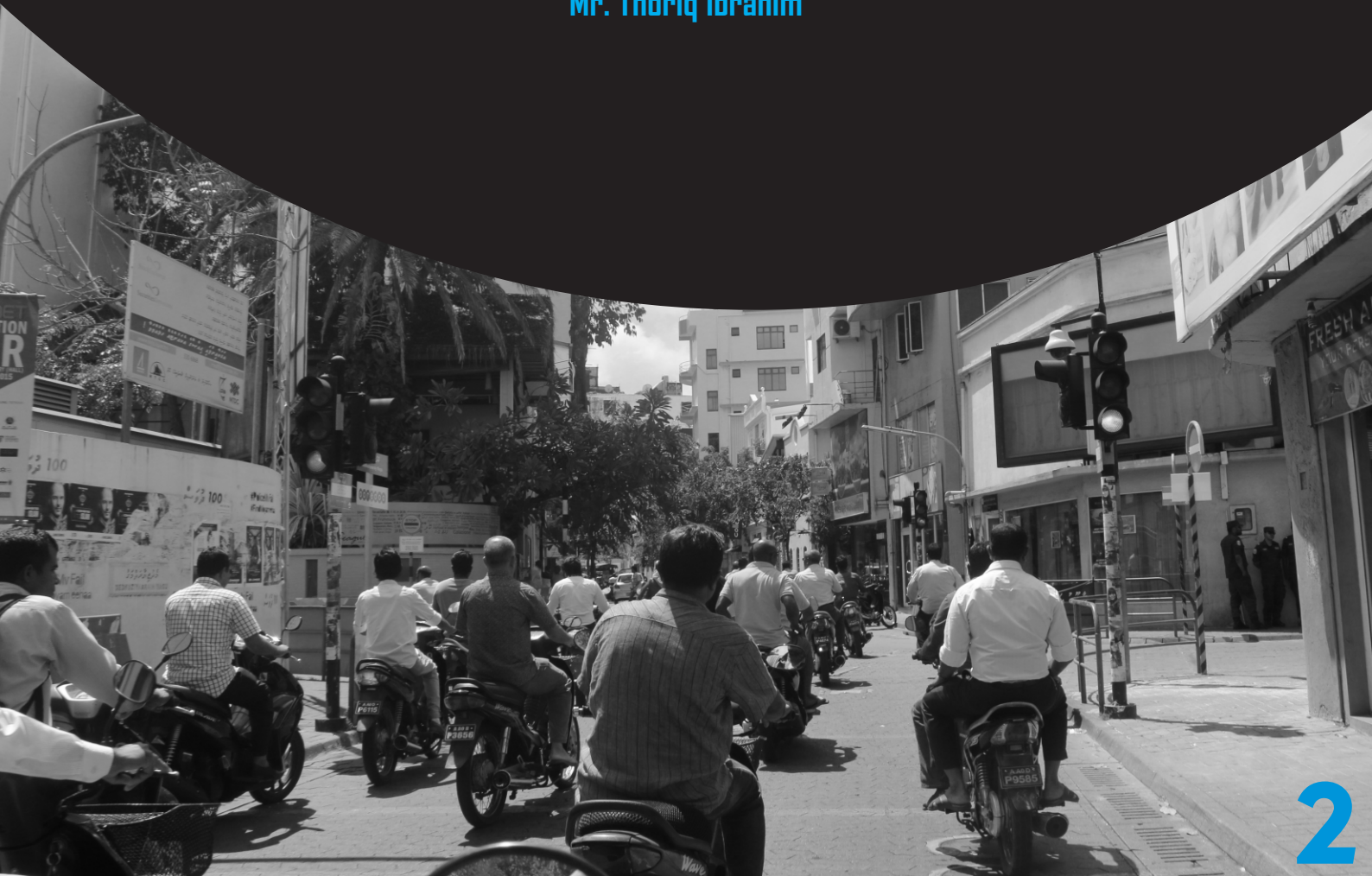
FEEDBACKS, COMMENTS, ARTICLES, PHOTOS, ETC.
ENVIRONMENT@ENVIRONMENT.GOV.MV



NOTES FROM THE MINISTER OF ENVIRONMENT AND ENERGY

With over one third of our population residing in Male', congestion is indeed a significant issue. Associated with this, the increase in the number of vehicles and waste on the streets has become more pronounced in recent years. There are no easy and straight forward solutions to this. There are, however, things that we as individuals and collectively as a community can do. The right behavioural changes can make a notable difference, not only in terms of addressing congestion and related issues such as increased waste, but also in having a positive impact on our health, our environment and community.

Mr. Thoriq Ibrahim



TRAFFIC CONGESTION



How safe is our daily commute? Apart from the much apparent threat of road accidents, have we pondered upon the exhaust fumes of the vehicles we are subjected to inhale? While the nation lacks an enforceable emission regulation along with the congested traffic, exaggerates the risk posed to the health and wellbeing of the dwellers of the city of Malé'.

With every passing day, with every exhaust fume dose we intake, we are killing ourselves softly with our own hands.

COMMON EXHAUST POLLUTANTS

- ⇒ Particulate Matter
- ⇒ Hydrocarbons
- ⇒ Carbon Monoxide
- ⇒ NO_x
- ⇒ Carbon Dioxide

ASSOCIATED HEALTH ISSUES

- ⇒ Asthma
- ⇒ Chronic Obstructive Pulmonary Disease (a group of diseases that cause airflow blockage and breathing problems)
- ⇒ Cardiovascular Disease
- ⇒ Cancer
- ⇒ Diabetes
- ⇒ Increases mortality among susceptible groups

Diesel exhausts can contain mixture of gases and fine particulates that contains more than 40 toxic air contaminants which include known carcinogens such as benzene, arsenic and formaldehyde.

EXHAUST POLLUTANT BENZENE HAS BEEN LINKED TO LOWERED IMMUNITY AND LEUKAEMIA. US-EPA ESTIMATES THAT VEHICLE EMISSIONS ACCOUNT FOR AS MANY AS HALF OF ALL CANCERS ATTRIBUTED TO OUTDOOR AIR POLLUTION.

**FINE PARTICULATE MATTER CAN ALTER THE HEARTS RHYTHM AND CAUSE INFLAMMATION
CARBON MONOXIDE: CAN CAUSE EYE IRRITATION, DOZINESS, LETHARGY AND MIGRAINES. THE GAS IS PARTICULARLY DANGEROUS AS IT IS COLOURLESS AND OVER EXPOSURE MAY RESULT FATAL.**

OXIDES OF NITROGEN OR NO_x: CAUSES IRRITATION TO THE LINING OF THE LUNGS AND SEVERE NAUSEA.

URBAN OPEN SPACES

An urban open space is any open piece of land which is undeveloped and is accessible to the public. These areas provide important environmental, economic and public health benefits to the dwellers of the area.

STATS: URBAN OPEN SPACES IN MALE'

Urban open spaces of Male' including parking areas accounts **less than 11%** of the total land area of the Male' (excluding Hulhumale' and Vilimale').

“PEOPLE WHO ENGAGE IN REGULAR PHYSICAL ACTIVITY BENEFIT FROM REDUCED RISK OF CORONARY HEART DISEASE, HYPERTENSION, COLON CANCER, AND NON-INSULIN-DEPENDANT DIABETES; IMPROVED MAINTENANCE OF MUSCLE STRENGTH, JOINT STRUCTURE, AND JOINT FUNCTION; WEIGHT LOSS AND FAVOURABLE REDISTRIBUTION OF BODY FAT; IMPROVED PHYSICAL FUNCTIONING IN PERSONS SUFFERING FROM POOR HEALTH; AND HEALTHIER CARDIOVASCULAR, RESPIRATORY, AND ENDOCRINE SYSTEMS” U.S. SURGEON GENERAL, 1996. ”

“IT IS ALSO FOUND THAT PHYSICAL ACTIVITIES RELIEVES SYMPTOMS OF DEPRESSION AND ANXIETY, IMPROVES MOOD AND ENHANCES PSYCHOLOGICAL WELL-BEING.

“ACCESS TO PLACES FOR PHYSICAL ACTIVITY LED TO A 25.6% INCREASE IN THE PERCENTAGE OF PEOPLE EXERCISING ON THREE OR MORE DAYS PER WEEK. CENTER FOR DISEASE CONTROL AND PREVENTION. UNITED STATES.”

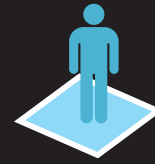


“A STUDY REVIEWED PATIENTS IN A PENNSYLVANIA HOSPITAL WHERE SOME SURGICAL PATIENTS HAD A VIEW OF A STAND OF TREES, WHILE OTHERS FACED A BRICK WALL. MEDICAL RECORDS SHOWED THAT PATIENTS WITH THE TREE VIEWS HAD SHORTER HOSPITALIZATIONS, LOWER REQUIREMENT FOR PAINKILLERS AND LOW NEGATIVE COMMENTS IN THE MEDICAL RECORDS COMPARED WITH THE PATIENTS WITH BRICK WALL VIEWS.”

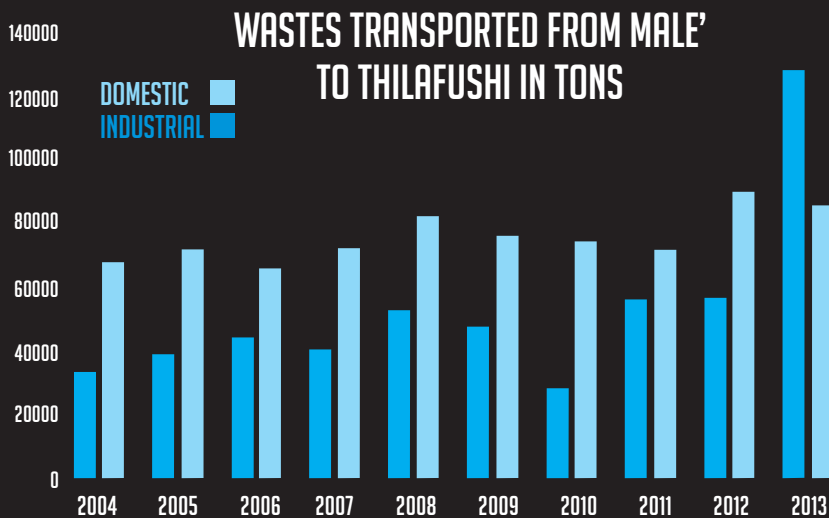
DEMOGRAPHICS

THE CAPITAL OF MALDIVES IS ONE OF THE MOST DENSELY POPULATED PIECES OF LAND IN THE WORLD. THE POPULATION DENSITY OF MALE' IS 65,776 PER KILOMETRE, MAKING IT ONE OF THE TOP TEN MOST DENSELY POPULATED URBAN AREAS. THIS FIGURE IS INCREASING AT AN ALARMING RATE EACH YEAR, ADDING TO THE CONGESTION PROBLEMS ALREADY FACED BY THE ECONOMIC HUB OF THIS ISLAND NATION.

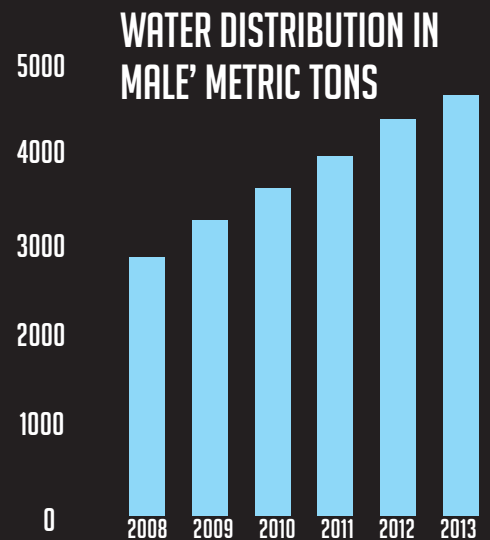
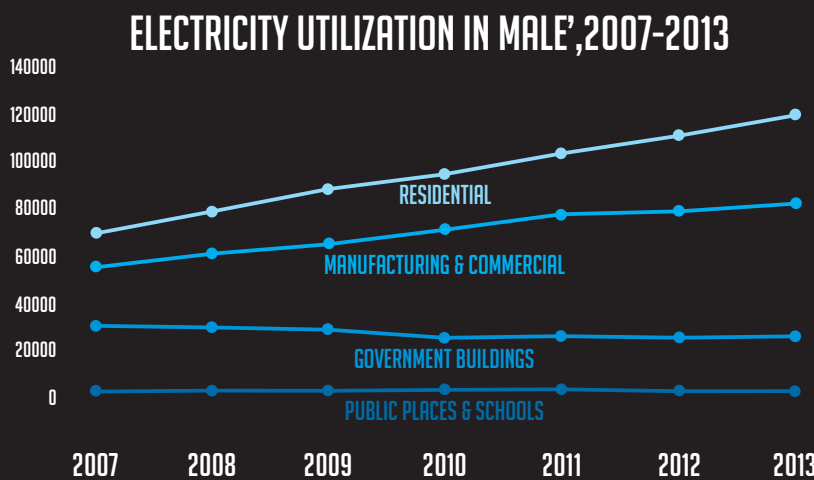
POPULATION DENSITY OF MALE':
65,776 PER KILOMETRE



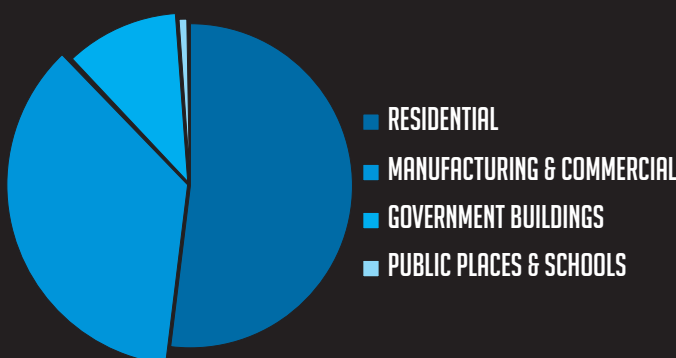
*STATISTICS GATHERED FROM NATIONAL BUREAU OF STATISTICS



INDUSTRIAL WASTE TRANSPORTED TO THILAFUSHI FROM MALE' IN 2013 IS TWO FOLDS OF 2012 WHILE THE AMOUNT OF DOMESTIC WASTE HAVE BEEN CEILING BELOW 90,000 TONNES SINCE 2004. THIS IS ALARMING AS AT THE MOMENT THE WASTE MANAGEMENT PRACTICES LACKS A STRINGENT SEGREGATION SYSTEM AND WOULD MOST PROBABLY END UP BEING OPENLY BURNED, RELEASING HEAVY METALS AND OTHER TOXIC FUMES TO THE AIR. WHILE SOME OF THESE TOXINS ARE KNOWN CARCINOGENS THIS UNHEALTHY PROCESS POSES OTHER RISKS AS WELL, SUCH AS COMPLICATIONS OF LIVER, IMMUNE SYSTEM, ENDOCRINE SYSTEM, REPRODUCTIVE SYSTEM AND EFFECTS ON THE DEVELOPING NERVOUS SYSTEMS, ETC.



SHARE % OF ELECTRICITY UTILIZATION IN MALE', 2013



CONSUMPTION OF FUEL FOR ELECTRICITY GENERATION IN SELECTED LOCALITIES BY PUBLIC SECTOR



65,107,000
LITRES

MONTH IN REVIEW

03 FEB: CONTRACTS AWARDED FOR THE DESIGN AND SUPERVISION OF WATER AND SEWERAGE SYSTEM IN FUVAHMULAH

CONTRACTS WAS AWARDED TO RIYAN PRIVATE LIMITED FOR THE DESIGN AND SUPERVISION OF WATER AND SEWERAGE SYSTEM IN GNAVIYANI ATOLL FUVAHMULAH. THE ESTIMATED AMOUNT OF THIS PROJECT IS MVR231 MILLION. MVR174 IS FUNDED BY KUWAIT FUND FOR THIS PROJECT AND MVR57 MILLION IS FUNDED BY THE GOVERNMENT OF MALDIVES. THE PROJECT IS EXPECTED TO BE COMPLETED WITHIN 24 MONTHS FROM THE DATE OF CONTRACT.



04 FEB: WORKS COMMENCED FOR THE ESTABLISHMENT OF WATER AND SEWERAGE SYSTEM IN HAA ALIFU ATOLL THURAAKUNU ISLAND

MINISTER OF ENVIRONMENT AND ENERGY, MR. THORIQ IBRAHIM INAUGURATED THE COMMENCING OF THE WORKS OF ESTABLISHING WATER AND SEWERAGE SYSTEM IN HAA.ALIF ATOLL THURAAKUNU ISLAND. IN COOPERATION WITH THE ISLAND COUNCIL, THE PROJECT FUNDED BY ALIFULHU THUTHU (AFT) FOUNDATION IS SCHEDULED TO BE COMPLETED IN OCTOBER 2015 FOR THE WATER PROJECT AND APRIL 2016 FOR THE SEWERAGE PROJECT. THE CONTRACTOR OF THE PROJECT IS ALTEC MALDIVES PVT. LTD.

06 FEB: WORKS COMMENCED FOR THE ESTABLISHMENT OF SANITATION FACILITIES IN SHAVIYANI ATOLL KANDITHEEM ISLAND.

MINISTER OF ENVIRONMENT AND ENERGY, MR. THORIQ IBRAHIM INAUGURATED THE COMMENCING OF THE WORKS OF ESTABLISHING WATER AND SEWERAGE SYSTEMS IN SHAVIYANI ATOLL KANDITHEEM ISLAND. THE MVR40,977,296.39 PROJECT WHICH INCLUDES LAYING DOWN OF SEWERAGE PIPES, ESTABLISHING OF SEWAGE PUMP STATIONS AND SEA OUTFALLS IS CARRIED OUT BY MALE' WATER AND SEWERAGE COMPANY (MWSC), UNDER A DESIGN AND BUILD CONTRACT.



05 - 07 FEB: MINISTER OF STATE FOR ENVIRONMENT AND ENERGY MR. ABDULLAHI MAJEED ADDRESSED "THE FIFTEENTH DELHI SUSTAINABLE DEVELOPMENT SUMMIT"

MINISTER OF STATE FOR ENVIRONMENT AND ENERGY MR. ABDULLAHI MAJEED ADDRESSED "THE FIFTEENTH DELHI SUSTAINABLE DEVELOPMENT SUMMIT" WHICH WAS HELD FROM 05-07 FEBRUARY 2015. IN HIS SPEECH HE HIGHLIGHTED THE VULNERABILITY OF MALDIVES CLIMATE, THE INCREASE OF EROSION AND SCARCITY OF SAFE DRINKING WATER DURING THE DRY SEASON. FURTHERMORE, HE INDICATED THE NEGATIVE IMPACTS OF CLIMATE CHANGE BY STRESSING FURTHER ON HOW THE INDUSTRIES MITIGATE THE EFFECTS OF CLIMATE CHANGE AND ENCOURAGED THEM.

07 FEB: WORKS COMMENCED FOR THE ESTABLISHMENT OF SEWERAGE SYSTEM IN RAA ATOLL MADUVVARI ISLAND

MINISTER OF ENVIRONMENT AND ENERGY, MR. THORIQ IBRAHIM INAUGURATED THE COMMENCING OF THE WORKS OF ESTABLISHING OF SEWERAGE SYSTEM IN RAA ATOLL MADUVVARI ISLAND. THE PROJECT COSTING MVR49,967,811.83 WHICH INCLUDES LAYING DOWN OF SEWERAGE PIPES, AND ESTABLISHING OF PUMP STATIONS AND SEA OUTFALL IS CARRIED OUT BY MWSC AND IS SCHEDULED TO BE COMPLETED BY DECEMBER 2015.



09 FEB: PHOTO EXHIBITION ON ENERGY AND ENVIRONMENT

A PHOTO EXHIBITION ORGANIZED BY THE MINISTRY OF ENVIRONMENT AND ENERGY AND GERMAN INTERNATIONAL COOPERATION (GIZ) WAS HELD FROM 9TH TO 11TH FEBRUARY 2015 WITH THE OBJECTIVE OF EXHIBITING DIFFERENT ASPECTS OF ENERGY, ENVIRONMENT AND CLIMATE CHANGE THROUGH PHOTOGRAPHS. THE EXHIBITION WAS OPENED BY MINISTER OF EDUCATION DR. AISHATH SHIHAM, MINISTER OF ENVIRONMENT AND ENERGY MR. THORIQ IBRAHIM AND GERMAN AMBASSADOR TO SRI LANKA AND MALDIVES DR. JÜRGEN MORHAD.

19 FEB: CERTIFICATES AWARDED TO THE PARTICIPANTS OF THE TWO DAY TRAINING WORKSHOP ON OZONE DEPLETING SUBSTANCES AND REFRIGERATION AND AIR CONDITIONING TRAINING PROGRAMME

CERTIFICATES WERE AWARDED TO THE PARTICIPANTS OF A TWO DAY TRAINING WORKSHOPS ON OZONE DEPLETING SUBSTANCES, REFRIGERATION AND AIR CONDITIONING. ENFORCEMENT OFFICERS AND TECHNICIANS PARTICIPATED IN THE WORKSHOPS HELD AT ADDU CITY. SESSIONS WERE CONDUCTED BY THE DEAN OF FACULTY OF ENGINEERING TECHNOLOGY OF MNU, OFFICERS FROM MALDIVES CUSTOMS SERVICES AND STAFFS OF MINISTRY OF ENVIRONMENT AND ENERGY.



23 FEB: WORKSHOP ON MINI-GRID DESIGN AND TECHNOLOGIES

A WORKSHOP ON MINI-GRID DESIGN AND TECHNOLOGIES WERE HELD AT HOTEL JEN. EXPERTS AND SPECIALISTS FROM ASIAN DEVELOPMENT BANKING AND ENERGY SECTOR CONDUCTED SESSIONS FOR PARTICIPANTS WHICH INCLUDES FROM MALDIVES ENERGY AUTHORITY (MEA), STELCO, FENAKA CORPORATION AND THE MINISTRY.



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