

DISASTER MANAGEMENT

Official Journal: Disaster Management Institute of Southern Africa



Volume 2 No 1



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Organiser

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DISASTER MANAGEMENT



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DISASTER MANAGEMENT

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Dr Johan A Minnie

Dear Reader

You hold in your hands the latest edition of the official journal of the Disaster Management Institute of Southern Africa (DMISA), the non-profit SAQA approved professional body for Disaster Management in South Africa and the professional home of Southern Africa's Disaster Management practitioners. DMISA seeks to provide learning, networking and alignment opportunities for those who have answered the call to devote their professional lives to reducing the risk and the impact of disasters and this journal is an important component of DMISA's continued efforts to support the profession.

Congratulations to EXCO member Mr Schalk Carstens and our publisher Ms Lee Raath-Brownie on publishing another good read, your hard work in

producing this publication is appreciated and the Disaster Management Journal is certainly developing into a polished, informative and valuable resource for any disaster management functionary.

As outgoing president of the institute, it is my considerable privilege to extend the warm greetings of the DMISA Journal publication team, the council and executive committee of DMISA and all the members of DMISA, to the esteemed readers of this publication.

This issue of Disaster Management Journal comes after a very successful DMISA DRR 2016 Conference that was held at ATKV Goudini Spa in the warm heart of the Cape Winelands from 21 to 22 September 2016. The proceedings of the conference and the resultant learning, networking and alignment opportunities will be described in this issue. I would like to use this opportunity to sincerely thank the chairperson of the executive committee, Mr Pat Adams and the administrator of the institute, Ms Karin Muller, for their hard work in making the conference happen and succeed. I would also like to thank all of the DMISA executive committee and DMISA council members that made valuable contributions, as they always do, to the successful running of our annual disaster risk reduction showcase.

This year the conference broke new ground in terms of preconference events and activities during the conference. The South African National Disaster Management Centre (NDMC) hosted a guidelines workshop the day before the conference and on the same day a major incident management exercise was hosted at the conference venue by



Western Cape Disaster Management and Fire Brigade Services with the involvement of the Cape Winelands and Breede Valley Disaster Management, Fire and Emergency Services and many other role players. Both of these were valuable learning and alignment opportunities and I would like to thank the convenors of these two events, Mr Jurgens Dyssel from the NDMC and Mr Colin Deiner, the chief director: Disaster Management and Fire Brigade Services at the Western Cape Provincial Government and the convenor for the National Incident Management System workgroup of the National Disaster Management Advisory Forum.

On the second evening of the conference a first time 'Movie Night' Continuing Professional Development (CPD) session was ably facilitated by DMISA EXCO member, Mr Owen Becker of Buffalo City. The participants in this session watched fascinating visuals of the Hillsborough disaster and took part in subsequent discussions on the topic of mass events disaster risk reduction. Thanks goes to Mr Owen Becker for his efforts in getting this new learning opportunity side event to the conference off the ground.

A special word of thanks must also go to all the speakers that were included in a very interesting line-up of papers. The conference theme of re-evaluating resilience against the background of climate, disaster risk, early warning and response inspired many thought-provoking and instructive papers. Every speaker went to considerable effort to develop firstly an abstract and then a presentable paper and then delivering the paper at the conference. We recognise and appreciate their investment of time and effort that contributed to the encouraging proceedings of the conference.

Highlights of the conference will be provided elsewhere in this publication but I would be negligent if I did not express the sincere gratitude of DMISA for the generous contributions of our sponsors for the conference. We thank the Breede Valley Municipality, the Cape Winelands District, the Western Cape Government, the South African Weather Service, Santam, Hytera and the NDMC for their generous contributions.

While the conference is a major event on our annual calendar, the biennale election of the DMISA council and the subsequent election of the president, deputy president, chairperson of executive committee and additional executive committee members have taken place. Congratulations and best wishes on a fruitful term of office to the newly elected DMISA president, Mr



Incoming president, Bafana Mazibuko and outgoing president Dr Johan Minnie

Bafana Mazibuko, deputy president Mr Mduduzi Nxumalo, EXCO chairperson Mr Pat Adams and additional EXCO members Ms Mandisa Nohashe, Mr Schalk Carstens and Mr Owen Becker. I look forward to working with this capable team as immediate past president.

The main thrust of DMISA's activities currently focuses on professionalisation. The administration of the SAQA-approved Disaster Management Professional (PrDM) designation is shaping up well and DMISA as a collective is learning and improving as we go along in this regard with the valuable guidance and support of SAQA. The certificates of registration for the first batch of disaster management professionals who were approved by EXCO on 27 November 2015 were formally handed over at DMISA's annual general meeting. This small but important ceremony was a significant milestone in the evolution of DMISA as professional body and is part of the mandate DMISA has as SAQA-approved professional body for disaster management. We have made great strides and more achievements are beckoning as we go through the process of monitoring and evaluating our performance as professional body and dealing with the successful application for another three professional designations, being that of Disaster Management Technician (DMT), Disaster Management Associate (DMA) and Disaster Management Practitioner (DMPc). We will continue to communicate with our members, the industry and stakeholders in this regard.

While DMISA is working hard in supporting our members in their careers and in achieving professional registration and recognition, we realise that we all function in a dynamic and challenging environment. No disaster will wait for you to first get

a certificate of registration before it impacts upon communities, wipes out infrastructure, stunts economic growth and kills people. The work must go on. Our aim is therefore to provide generous opportunities for continuous professional development as well as the recognition of prior learning and to make professional registration as simple and easy as possible. We want you to be the best that you can be, in the interest of all the communities that we serve.

A final remark about the disaster hazards, vulnerabilities and capacity issues we are now facing. Southern Africa is in the grip of a severe drought and our response to water scarcity and drought still seems patchy, I would like to appeal to every disaster management practitioner to really apply their minds and to work together with other disciplines, collecting and facilitating joint effort as far as possible, to enable us to protect life, property, the environment and socio-economic sustainability of the communities we serve.

It has been an honour and a blessing for me to serve as president of this noble institute from 2014 to 2016. My sincere thanks to everyone in the institute that has made this journey so enjoyable, productive and meaningful on a personal level. I am looking forward to more opportunities for having fun thankfully doing good well and will enjoy working with you to create more learning, networking and alignment opportunities for the disaster management collective in Southern Africa.

It is my hope and prayer that DMISA, under the leadership of incoming president, Mr Bafana Mazibuko, will go from strength to strength and increase its positive contribution to reducing disaster risk and increasing resilience in Southern Africa.



Schalk Carstens

ANOTHER successful DMISA conference was held at Goudini Spa, Cape Winelands District in September 2016. There must be something in the Boland air, because this DMISA conference was just as successful as the conference that was held previously at the same venue. However, we must not discount the great work that was done by Pat Adams as well as Karen Muller who supported him with the planning of the event. Congratulations Pat and your team for one of the best conferences – ever!

The organisers have, for the first time, organised a ‘pre-conference’ event namely a practical exercise organised by Mr Colin Deiner, head of the Western Cape Disaster Management Centre. The exercise was based on the aspects of the incident command system (ICS). The scenarios for the exercise were extremely tough and relevant. The first scenario was a simulation of an earthquake, followed closely by nuclear and chemical incidents (simultaneously) and the last scenario was a multi-storeyed residential building structural collapse.

This real table top and communication exercise was held in collaboration with several stakeholders from national, provincial, sector departments, municipal safety and security as well as emergency services fraternity. Several forward command posts as well as the appropriate joint operational centres were established in some of the Goudini Spa conference venues. The exercise was attended by approximately 90 delegates. The attendance of the different representatives at the exercise also contributed to them earning continues

professional development (CPD) points, which is now a requirement of SAQA for the registration of DMISA as a Disaster Management Professional Organisation. The accumulation of CPD points contributes for the respective disaster management professional levels.

The exercise was a huge success and it definitely highlighted several gaps and grey areas in the efficacy in our current disaster readiness to coordinate an emergency and or disaster situation through the application of an agreed upon integrated unified command and control system on all spheres of Government. It goes without saying that Colin and his team must be commended for their endeavours to initiate an ICS system to be utilised by all stakeholders in South Africa as a basis to standardise a multi-hazard unified command and control system. The exercise was based on the principle of the mentioned ICS system.

During the exercise, I had a *deja vu* moment that took me back to a time in history where we, as disaster management practitioners, had similar exercises on a regular basis and where these exercises were a requirement of legislation. These exercises forced all stakeholders to have all their ducks in a row. I also thought about my remarks in the foreword in the last issue of this publication where the question was posed ...“In future comments in this publication, I would like to focus more and discuss the implementation of Civil Protection Act versus Disaster Management Act. What is the difference between these two acts and did we actually succeed in the transition process...”

Since the afore-mentioned exercise at Goudini, several informal discussions were held with experts in the field of disaster management as well as research on what was actually contained in the Civil Protection Act, Regulations and the Provincial Ordinances. I also perused the Disaster Management Green Paper, White Paper as well as all other applicable legislation and policy documents from 2002 to present. Some possible gaps came to the fore, namely:

- The Civil Protection Legislation required all municipalities to have ‘emergency plans’ for all schools, higher learning institutions, commerce and industry, crèches, old age homes, high risk chemical and hazardous installations, national key points, all high buildings as well as all government buildings.

- These plans had to be tested/evaluated every two years by the provincial Government. This evaluation was always conducted through practical, desktop and or radio exercises.
- The town clerk (municipal) manager was then the head of civil protection (head of disaster management) and his scope of practice legally required, also included that the municipality at least should have a valid Civil Protection ‘A’ grading certificate.

Only a few individuals, who might still be in practise, may be fortunate to be part of the mentioned transition period. In my time as a provincial civil protection officer, I had to ensure as part of my job description, that these ‘Municipal Emergency Plans’ be compliant with the minimum requirements of the said Civil Protection Act.

There might be municipalities that still comply with these ‘civil protection’ requirements for an emergency plan but what should be a matter of concern is that the current ‘disaster management’ legislation and policies do not at present specifically require that all the above-mentioned organisations as specified in civil protection, have valid plans and also that is a requirement of disaster management to test and evaluate all these plans every two years.

The Disaster Management Act also refers to plans to be evaluated/graded (different levels of plans) but it is not prescriptive on exactly what detail should be included as part of this evaluation process as well as the time span (intervals) between evaluations. Civil Protection required plans to be evaluated every second year to be valid, which is not a requirement anymore.

Working through the repealed (old) acts, regulations and policies, I came to the conclusion that we maybe have to ascertain what was contained in the ‘old’ legislation, as we might have missed some good practices in the implementation of the Disaster Management Act. In hindsight, the drafters of the new legislation should maybe have only considered to add risk reduction (prevention, mitigation) and rehabilitation and recovery aspects of ‘Civil Protection’ because in the transition process, some of the ‘good practices’ of the repealed legislation just disappeared. DMISA should maybe, in consultation with National Disaster Management Centre and other stakeholders representing all critical stakeholders, have a look at the

GETTING TO KNOW THE CHAIRPERSON OF THE EXECUTIVE COMMITTEE: PATRICK ADAMS

Compiled by Dr Cinde Greyling as requested by Schalk Carstens: member of the DMISA executive committee, portfolio holder: journal production and marketing

Pat Adams was re-elected as chairperson of the executive committee at a special council meeting of the Disaster Management Institute of Southern Africa (DMISA) at Goudini Spa, Worcester, on 23 September 2016 for another two-year term. This follows his first election as the chairperson of the executive committee in 2014.

Pat is no stranger to DMISA. After he joined in 1992, he was elected to the National Council of DMISA in 1998 and served on the executive committee since 2000 to date. From 2006 to 2010, Pat served as president of the institute and is also a fellow of DMISA.

Based on the extraordinary impact Pat made while being associated with DMISA, he was awarded a Gold Medal of Commendation with the following inscription: "In commendation of his outstanding service in promoting the image of the Disaster Management Institute of Southern Africa; In recognition of his unique contribution to the success of conferences; His unselfish consideration and caring for the wellbeing of his colleagues and for the exemplary manner in which he has served two successive terms as president."

On a personal note

Behind this imposing portfolio is an honourable husband, father and grandfather, who used to be a record-holding athlete. Pat is married to Elaine and

has three children and five grandchildren. His hobbies include walking, collecting red and white wine and researching politicians in order to understand what makes them tick. He was a member of the Aurora Football Club since 1968 and represented the Western Province and the South African 11 soccer teams on several occasions. When injuries ended his soccer career prematurely, he turned his focus to studies and his career.

Career

Pat radiates distinctive leadership skills that were appreciated by the various organisations he served during his impressive career. Other professional bodies that thrived under his influence include the Institute of Licensing Officials of South Africa (IOL), the Institute of Traffic and Municipal Police Officers of Southern Africa (ITMPO) and the Institute for Municipal Law Enforcement of Southern Africa (IMLE). He also served on the Southern Gauteng Regional Committee of DMISA for six years of which he was chairperson for two terms from 2002 to 2005.

Amongst other, Pat obtained a diploma in Management Studies and Master's Degree in Business Administration (MBA) from the Business School Netherlands International. He started a doctorate in Business Administration (DBA) through the same institution, with the research topic, 'Disaster prevention and mitigation: Critical components towards sustainable development'. Hopefully, he will find the time to complete this study in the near future. He enjoys the satisfaction of learning and has a strong desire to contribute, enhance and broaden the general body of



Pat Adams, chairperson of DMISA

knowledge as well as his own knowledge and skills. Although he admits that his academic achievements have come with "blood, sweat and tears" and he gratefully acknowledges the undivided support of his wife and children during this time.

After spending 12 years in the textile industry, Pat's fruitful career started in local government with the Western Cape Regional Services Council, which that later became the Cape Metropolitan Council, in February 1989 in the Civil Defence Department. He served in the capacity as civil protection liaison officer until March 1997.

Pat was appointed as director of Protection Services of Oostenberg Municipality in 1997 and moved to Alberton in 1999 to become the head of Public Safety. Following the

preparedness plans (emergency plans) that was the main objective of Civil Protection and ascertain who is doing that crucial function now. In essence to measure the level of the preparedness plans of schools, petro-chemical installations, national key points etc.

As previously stated, the comparison of the disaster management legislation of South Africa, similar legislation of our neighbours and or other countries, could be good departure points for

future constructive discussion in this publication. This foreword might have stimulated some thought. You are more than welcome to state your view in a future article and or take your view on these legal matters through the regional structures of DMISA.

In conclusion, I just want to thank all that have contributed to our publication as well as a special word of thanks for all the institutions that used our journal to place their

advertisements. Without your financial contribution, this publication would not have been possible. Lastly, as always, the most important person, namely our publisher Lee, a special word of thanks and sincere appreciation for all you have done for the institute, sometimes without due recognition and acknowledgement. Without your continued commitment and continues unselfish dedication, this publication might not have been possible.



Pat as president of DMISA 2006 to 2008. He was also elected as president for 2008 to 2010

establishment of Ekurhuleni Metropolitan Municipality, he became the interim head of Public Safety and acting chief of Police before taking up the positions of director of the Disaster Management Centre and acting executive director of Public Safety.

During his years in Gauteng, Pat was appointed to the Section 14(5) Committee on Public Safety in the East Rand, which was confirmed by the MEC for Development Planning and Local Government of the Gauteng Province. The committee's main responsibility was to implement the transformation of Local Government service delivery priorities in terms of the Structures Act pertaining to local governance in South Africa. He was also appointed by the Section 14(5) Public Safety subcommittee as the transformation convenor responsible for the portfolio of Disaster Management and Communications/107 Centres for the East Rand.

Another highlight during that time was his appointment by the South African Local Government Association (SALGA) as

convenor of the Disaster Management and Communications Technical Task Team.

After six years in Gauteng, Pat returned to his roots when he was appointed in January 2006 as director: Emergency Services of the City of Cape Town until January 2010. He served as a safety administrator with the Overstrand Municipality from 2011 to 2012 and as a project executive with eThekweni Metropolitan Municipality from 2013 to 2015.

Pat served a total of 26 years in local Government of which 15 years at a senior management level within metropolitan municipalities. He represented various municipalities overseas at conferences, seminars and exhibitions, which included doing research.

During June 1995, Pat went on a research trip through 12 states of the United States of America and interviewed many disaster management and fire and rescue functionaries. He was also privileged to be selected for training and empowerment by the Israeli Centre for International Cooperation and Socio-Political Options in 1996. During November and December of the same year, he attended a course at Beit Berl University College in Kfar Saba, Tel Aviv, Israel, on Socio Political options, Development, Leadership and Nation Building.

In August 2000, Pat attended a conference of the Institute for Traffic Engineers (ITE) in Nashville, Tennessee, United States of America and in September of 2000, he visited Robot Foto Und Electronic GMBH (Traffic Safety Systems) in Dusseldorf, Germany. In September 2003, he was nominated to be part of a delegation selected by national Government to attend a disaster management conference and exhibition in Paris, France. In June and September 2005, he was part of two fact-

finding delegations to Germany for the 2006 FIFA World Cup.

Accompanying the Provincial Government of the Western Cape in August 2007, Pat was part of another fact-finding tour to Bavaria, Germany in respect of 2010 World Cup Soccer and Nuclear Safety Programme. In October 2009, he again represented the City of Cape Town on a visit to Germany, whereby he signed reciprocal training agreements on behalf of the Mother City and the City of Munich. Then in 2010, Pat represented DMISA at a Disaster Management Conference in Davos, Switzerland.

DMISA president, Dr Johan Minnie, reported the following about Pat Adams at the DMISA council meeting held on 20 September 2016. "It has been an absolute pleasure to witness how Mr Adams tackled the responsibilities of EXCO chair in this term of office and DMISA has really benefited from his exemplary work ethic and impressive productivity. I am truly thankful for the support and guidance that I received throughout this period from the driver of the DMISA bus, the chairperson of EXCO. We continue to see the benefit in terms of effectiveness, efficiency and profitability."

From a little boy born in Athlone, Cape Town, on 13 June 1956, to a mentor for many, Pat can look back at a career that touched many lives. "I am humble and very thankful to be in a position in life where I can be a mentor to people." His key to success is balance in his personal, professional and spiritual life. He also believes that all people are important: "Everyone needs to be treated the same," says this family man who draws his strength from God.

DMISA's executive committee surely has a chairperson par excellence and eagerly anticipates Pat's further involvement in this institution.



Pat studied at the Israeli Centre for International Cooperation and Socio-Political Options in 1996



In 2000 Pat was acting chief of police for Ekurhuleni Metropolitan Municipality

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TWO GOLD COMMENDATIONS

AWARDED AT 2016 DMISA CONFERENCE



The Disaster Management Institute of Southern Africa (DMISA) awarded Gold Commendations to two of its stalwarts at the recently held DMISA conference at Goudini Spa in Worcester, Western Cape. The Gold Commendations were awarded to Anthony Roland Kesten and Schalk Willem Carstens respectively.

Anthony Roland Kesten

Anthony Kesten was commended for his outstanding service to the disaster management profession and the Disaster

Management Institute of Southern Africa, as well as for promoting disaster risk reduction in southern Africa. Kesten's Gold Commendation included the following:

- For his undivided upholding and promoting of the objectives of the Institute
- His unselfish consideration and caring for the wellbeing of his colleagues
- In recognition of his diligent and unwavering contribution to the success of conferences
- And for the exemplary manner

in which he has served his term as president.

Schalk Willem Carstens

Schalk Carstens was also commended for his outstanding service to the disaster management profession and the institute in addition to promoting disaster risk reduction in southern Africa. Carstens' Gold Commendation included the following:

- In recognition of his diligent and unwavering contribution to the success of conferences
- For his undivided upholding and promoting of the objectives of the institute
- His ability and passion to, at all times, ensure the best interest of the members and colleagues
- And for the exemplary manner in which he has served his term as president.

Both were present at the DMISA 2016 Conference in Worcester to receive their Gold Commendations from Dr Johan Minnie, now past –president of the institute. It is certain that with the passion and dedication the Kesten and Carstens observe, that it can only have a positive outcome for not only the institute but also for the disaster management fraternity as a whole.

Congratulations! 🎉

UGANDA: PREPAREDNESS SAVES LIVES

The Uganda 'business as usual' model speaks to a people-centred, progressive and rights-based approach. This is demonstrated in two key areas: One, Uganda's dignified resettlement of refugees and two, Uganda's move away from managing disaster events to managing risk. Underpinning both areas is a commitment to invest and to integrate. To make evidence based decisions and to build, incrementally, on success and learn from failure, according to prime minister, Dr Ruhakana Rugunda.

Addressing risk and building resilience, is one of the key ways to bridge the humanitarian-development divide.

Uganda also recognises the threat climate change and natural hazards present to the significant development gains achieved and to its middle-income aspirations. To

protect these and to strengthen the nation's resilience, Uganda is committed to further investment in risk analysis, monitoring and financing and to the empowerment of communities to make risk-informed decisions on their development. In that regard, the United Nations has partnered with the ministry of water and environment to procure and install high resolution weather and hydrological equipment for real time monitoring of the environment and climate.

The \$2 million worth of equipment will be shared by the Uganda National Meteorology Authority and the Department of Water Resource Management. The result is that in the past two years, Uganda has improved the timeliness and reliability of weather early warning information; from 40 to approximately 80 percent. Uganda now ably receives 'real-time' weather information, not only from the region but across the world.

The next step will be to increase access to this information by citizens as well as decision makers. Real time data on weather is important for development and human security. The National Emergency Coordination and Operations Centre is another example of Uganda's investment to reduce mortality in the event of disasters. The centre is unique with its clear role in managing risk, bringing together the right people, at the right time, to equip the government, districts and households with critical information that ultimately contributes to saving lives and reducing losses.

Informed by a commitment to support a new approach, a joint United Nations resilience strategy is now in place that outlines planning and implementation of resilience efforts so that in partnership with the government of Uganda the underlying root causes are addressed. 🌍

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WEST RAND DISTRICT MUNICIPALITY DISASTER MANAGEMENT CENTRE



West Rand DMC is strategically located in the municipal buildings in the centre of Krugersdorp

Situated in the heart of the West Rand, the West Rand District Municipality Disaster Management Centre is strategically located in the municipal buildings in the centre of Krugersdorp. The West Rand District Municipality (WRDM) is located on the south western edge of the Gauteng Province and consists of four local municipalities namely Mogale City, Merafong City, Randfontein and Westonaria. It is also home to the famous Cradle of the Humankind World Heritage Site. The West Rand region covers an area of 4 095 km² and has a population of 848 597.

Background

The West Rand District Municipality Disaster Management Centre was established in 1992 and was backed by the Civic Protection Act 67 of 1977. At the time, the centre managed all emergency calls, SAPS 10111 calls, municipal after hour complaints, as well as Pretoria West ie Silkaatsnek and Pelindaba's electrical complaints.

It was the first legislatively recognised 107 centre in the country and was established by disaster stalwart, Jorrie Jordaan. Dr Neil Barnard was the director general for the then Department of Institutional Affairs, which was responsible for the Civil Protection Act, Fire Brigade Services Act and the Emergency Communications Act.

Disaster Management Journal met up with head of centre, Peter Mokoto, to see what makes this centre successful, the challenges they face and what their future plans are. Mokoto is also the manager for disaster management and community safety.

Budget

The total operational budget for disaster management is R19 606 462.

Risk profile

The district of the West Rand is vulnerable to a wide range of threats. In recent years the threat profile has been complicated by the increased use, storage and transportation of numerous hazardous materials. Natural hazards include earthquakes limited to mining areas and the Witpoortjie fault, hail and floods, wildfires, sinkholes in urban areas, extreme weather and storms and landslides.

Technological hazards in its operational area include dam failures, hazardous material, transportation emergencies, train accidents, major truck accidents, airplane crashes, major mining accidents, sustained pollution of land, water and air, nuclear plant emergencies and major structure fires.

The most common emergency scenarios that the DMC encounters are hail, flash floods, veld fires, shack fires, sink hole formations due dolomite conditions and major motor vehicle accidents.

Operations

The centre has been offering a 24/7 operational service since its establishment in 1992. Being located in the municipal buildings in the centre of Krugersdorp, its location offers a safe environment, hidden from the public eye and is also tucked away, safe from outside violence like riots and the likes. The building is also constructed with very thick walls and an armour-reinforced concrete roof, making it very strong to survive disaster situations.

The centre is a dedicated disaster management facility and provides for easier communication in disaster situations. The facility includes a joint operational centre (JOC), store rooms for disaster relief materials, as well as a CCTV system that is installed throughout all the central business districts (CBDs) in the West Rand region.

The West Rand Disaster Management Centre is divided into two sections ie the call-taking area and the radio area. At the radio area is where communication takes place to all the role players such as the traffic services, fire brigade, ambulance services and the municipal services.

Services are outsourced when the need arises through the procurement systems.

The West Rand Disaster Management Centre uses its disaster management

plan and our standard operations procedures (SOPs) in order to prepare and respond to disasters.

The centre was only activated once during the past year for the local elections. However, it is also activated for the major incident exercises, which is held on a quarterly basis.

Incidents unique to the West Rand DMC are the formation of sink holes due to the high occurrence of dolomite in the area. This has been addressed through the Expanded Public Works Programme (EPWP) programme and the centre has appointed 10 people on a monthly stipend for a dolomite awareness programme in the Merafong area to mitigate the risk through awareness and education regarding dolomite.

Staff

The centre employs 39 permanent staff members who manage the centre on a 24-hour basis and a four-shift system. The staff complement includes a disaster management centre coordinator, four disaster management officers, a manager, four shift supervisors, four senior dispatchers, 24 call takers and a clerical assistant.

The shift supervisors ensure that the centre is properly operated for the duration of their shift and report any problems to the coordinator. The senior dispatcher takes the lead if the supervisor is not available. The senior dispatchers are also the more senior people on the shift, just below the



Peter Mokoto



Casper Jordaan

supervisor. The coordinator, manager and disaster management officers are all on 24-hour standby. The disaster management officers go out to assess incidents, coordinate relief efforts and actions taken to assist those affected by disasters.

All disaster management officials are all well qualified, trained and at all times attend latest skills development.

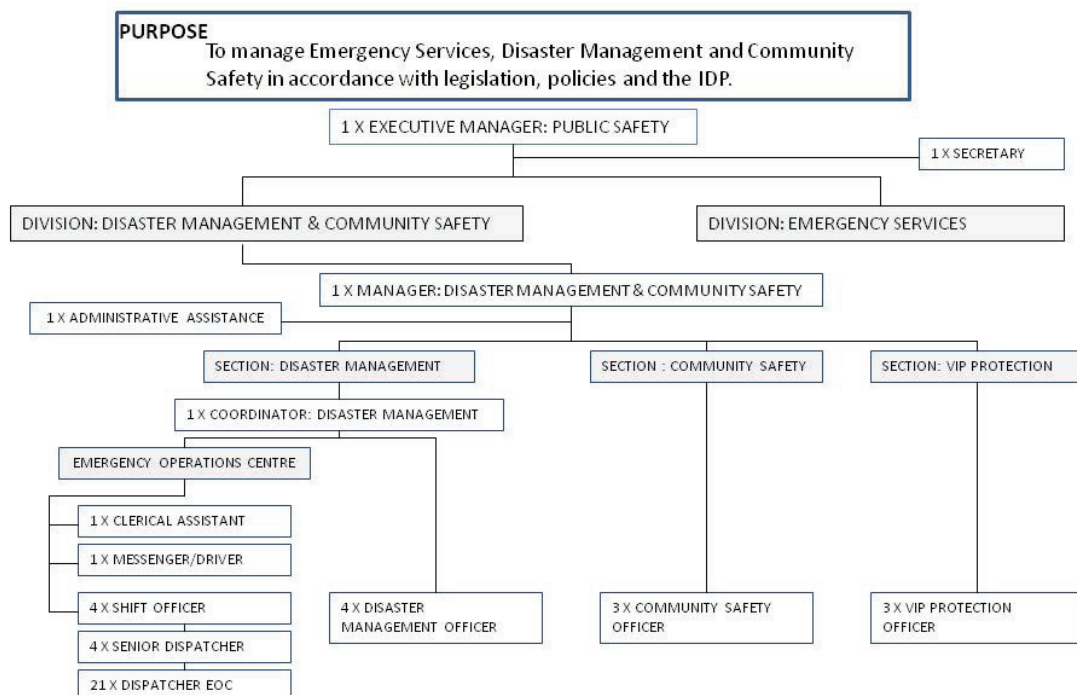
Skills development is implemented yearly by the human resources department and further personal development is undertaken by members of staff. On-

the-job training is also undertaken regularly when gaps are identified.

We asked Mokoto whether he felt he had enough competent staff for the incidents at hand and he replied, "Yes, 32 trained staff members to operate the centre are enough for the West Rand."

Mokoto started his career as a volunteer within the community working with the various divisions of policing, disaster and emergency where he met Jorrie Jordaan, who soon had him interested in disaster management. "I joined up full ▶

**WEST RAND DISTRICT MUNICIPALITY
ORGANIZATIONAL STRUCTURE: DEPARTMENT PUBLIC SAFETY**





Mpho Leisebe; Sandra Nomandla; Dineo Chauke, senior dispatcher; Abea Williams, supervisor; Tsidi Tjekela; Desiré Steenkamp, secretary and Zandi Mhiko



West Rand CCTV control room



West Rand District Municipality DMC call centre



West Rand District Municipality DMC call centre

▶ time in 1995,” said Mokoto. “I furthered my studies in disaster management and completed a one year course at Cranfield University in the UK in 2001. I also studied at Technikon SA, now UNISA and won the medal for the highest student for all five modules. I still lecture part-time at UNISA. I am now busy doing my masters through the University of the Free State.

His achievements include being the convenor of the South African Local Government Association (SALGA) Technical Task Team at national level for disaster management. He was also the convenor of the SALGA Gauteng Technical Task Team Public Safety Committee, which includes disaster management and emergency communications, fire brigade

and emergency medical services, municipal policing, traffic, licensing and security. “I also translated the Overview on Disaster Management Module Option One on behalf of United Nation Development Programme (UNDP) to Setswana,” said Mokoto.

His mentors include Jorrie Jordaan who introduced him to the industry. He added, “Pat Reid, Henk van Elst and Dewalt van Niekerk have all played major roles and I have always enjoyed consulting with them and sitting around the table and sorting out problems with them.”

“I am passionate about disaster management. I take work home. Even when I am on leave from the office, I am never on leave from disaster management. I think about everything around me in terms of disaster management.”

Equipment and software

The centre makes use of a web-based system ie Incident Emergency Disaster Management System (IEDMS), which was written by CTN Solutions for taking calls, a Tetra two-way radio communication network, mid and high-band radio networks, an SMS system ie MessageSoft for dissemination information. “We also make use of Microsoft products such as Windows 8.1, Windows Server 2013 RC2



West Rand District Municipality DMC was the first 107 centre in the country

and Microsoft Office, MessageSoft SMS System, Coltron Tornado two-way radio communication system, Motorola Tetra radio systems, the Remrad communication system by Sysman, a CCTV system installed and managed by Mafoko Security and a wireless network system provided by Brilliantel,” said Casper Jordaan, the disaster management centre coordinator, son of Jorrie Jordaan. Casper Jordaan has been the centre’s coordinator since 2013, however, he started working at the centre in 1994 as a temporary call taker.

To integrate their hard copies with their IT software, they scan hard copies of files and upload it onto a server. “This server is our intranet page provider. We then create a new link for the scanned documents and upload these documents onto our intranet page. This makes documents readily available in real-time,” added Jordaan.

Recent major incidents

Recent major incidents include hailstorms in November 2014 and January 2016, which caused severe damage to property. “We also had a major wildfire in the Hekpoort area in 2015 that caused millions of Rands loss of livestock.

Challenges

Some of the challenges faced by the centre include staff shortages and lack of funding. “The main reason behind this is that part of the funding we received came from the province and the provincialisation of the emergency medical services caused a shortage of permanent staff and funds. We also lack sufficient resources due to the absence of funding from national and provincial Government. We have also experience a lot of downtime,” said Mokoto.

He elaborated, “Equipment shortfalls include the need for more Tetra radios to communicate with stakeholders, which will be an advantage. We are currently in process of developing a new telecommunications system with Brilliantel and this should be in place and active before the end of this year.”

Interagency involvement

The foundation of the West Rand’s emergency planning and response is a district-wide mutual aid system, which is designed to ensure that adequate resources, facilities and other support are provided to jurisdictions whenever their own resources prove to be inadequate to cope with a given situation(s).

The basis for the system is the West Rand Master Mutual Aid Agreement. It created a formal process wherein each jurisdiction retains control of its own



One of the new editions to the fleet



The vehicles are distinctly branded

personnel and facilities but can give and receive help whenever it is needed. Interagency involvement include all internal departments, local municipalities departments, provincial departments , certain national departments , Eskom,

Transnet, Telkom, the post office, non-governmental organisations (NGOs), CBOs, traditional leaders, volunteers, South African Police Service (SAPS) as well as the South African Defence Force (SADF) when needed for specific task. 🇷🇷



The disaster management centre’s fleet

FUKUSHIMA: REDUCING MORTALITY FROM COMPOUND DISASTERS

A new report highlights the lessons of Japan's 2011 earthquake, tsunami and nuclear disaster, the world's deadliest catastrophe in a decade and underlines how they fed into the creation of the Sendai Framework for Disaster Risk Reduction. The study by a team of leading international researchers wraps up the three-year Fukushima Global Communication Programme (FGC) at the Tokyo-based United Nations University: Institute for the Advanced Study of Sustainability. The project was funded by the Nuclear Regulation Authority of Japan.

The goal was to take stock of the human and social impacts of the March 2011 Great East Japan Earthquake and Tsunami and the resulting nuclear disaster as well as the challenges of the recovery process in the Fukushima region. "These challenges are by no means unique to Fukushima or Japan. Indeed, the impacts of the nuclear accident and the policy responses implemented hold particularly important lessons for disaster risk reduction measures across the globe," notes the 48 page "Fukushima Global Communication Programme Final Report."

Welcoming the report, Robert Glasser, the United Nations (UN) Secretary-General's Special Representative for Disaster Risk Reduction, said, "This triple disaster, which claimed more than 16 000 lives, accelerated an ongoing global shift to a multi hazard approach to disasters, in which risks are not viewed in isolation but as interlocking parts of a whole. "In our technology dependent world even the most well prepared societies can find themselves dealing with unexpected outcomes when that technology is impacted by extreme natural hazards."

A multi hazard approach to disaster risk management underpins the Sendai Framework, the 15-year international

blueprint for reducing disaster risk adopted in March 2015 at the third UN World Conference on Disaster Risk Reduction (WCDRR) in the Japanese city of Sendai, a community that has rebuilt in the wake of the 2011 earthquake and tsunami. The Sendai Framework aims to guide substantial global reductions in disaster mortality, the theme of this year's International Day for Disaster Reduction on 13 October and a focus of the first edition of World Tsunami Awareness Day on 5 November 2016.

It also seeks to bring down the number of people affected and to curb growing economic losses and also calls for the widest possible involvement of all members of society in reducing risk and in boosting recovery in the event of a disaster. In addition, in a field long dominated by natural hazards like earthquakes or cyclones, the Sendai Framework has brought technological hazards as well as health, centre stage for disaster risk management.

"The consensus within the disaster risk reduction (DRR) community is that technological hazards such as nuclear accidents must be addressed through a multi hazard approach, considering sequences of risks that can trigger such hazards and their impacts on the surrounding communities and environment. There is increasing acknowledgement of the need to adopt a multi hazard approach and it is emphasized in the Sendai Framework," the FGC report said.

The Sendai Framework's all-of-society approach also means challenges for the nuclear industry's safety culture. "In practice, nuclear emergency preparedness remains a highly specialised and closed field," the report said. "Opening up this field requires engagement with local communities and open communication about potential risks," it said.

"After the nuclear accidents at Three Mile Island (1979) and Chernobyl (1986) the forms and methods of effective risk communication were extensively discussed, yet the confusion and chaos observed during the Fukushima nuclear disaster demonstrated that many lessons had not been learned and that deep and extensive improvements were still required.

"With the continued use of nuclear power and the growing risk of compound disasters occurring due to climate change, the frequency and magnitude of technological disasters can be expected to increase globally. It is critical that the lessons of Fukushima are learned, to avoid ineffective risk communication in future and ensure that all affected people are prepared and able to make informed decisions about risk related to nuclear accidents."

The communication lessons of a nuclear emergency can also be applied to other hazards, the report said. The study also addressed disaster displacement, which can have a massive impact on lives and livelihoods, stoking post-traumatic stress and ill health and leaving people in limbo. Some 150 000 people were displaced from the Fukushima area, according to government data and two-thirds remain scattered across the country.

"The Sendai Framework also makes an important step forward in recognising displacement as one of the most severe consequences of disasters," the report said, noting that "regaining a normal daily life remains a distant goal for many displaced people. What does sustainable recovery mean in such a context? Findings from FGC research suggest that to 'build back better' after a compound disaster that resulted in large scale displacement, recovery policies must provide an enabling environment for the displaced people to pursue settlement options of their choice, be it return, local integration or resettlement." 🌐

UNESCO HELPS I-REACT STEP UP FOR DISASTER RISK REDUCTION

The International Day for Disaster Reduction (DDR) is celebrated every 13 October to raise awareness about the importance of the exposure to disasters and the risks faced. The 2016 edition will centre on the first of the seven targets of the Sendai Framework for Disaster Risk Reduction: reducing disaster mortality. Coinciding with this day, as part of its collaborative role of partner, United Nations Educational, Scientific and Cultural Organisation (UNESCO) is contributing to the promotion of the I-REACT project “Improving Resilience to Emergencies through Advanced Cyber Technologies”.

Fires and floods based disasters cause thousands of deaths, serious economic, cultural and natural heritage losses around the globe. In the past 10 years, according to the United Nations, extreme events cost up to 1,7 trillion of dollars and caused 0,7 million deaths. Besides, with the ongoing rise in global temperatures due to climate change, the increase of magnitude and occurrence of extreme weather events, combined with unsustainable development practices will seriously challenge the resilience of the international community, especially in developing countries.

Held every 13 October, the day celebrates how people and communities around

the world are reducing their exposure to disasters and raising awareness about the importance of reining in the risks that they face. This year, the theme is Live to Tell: Raising Awareness, Reducing Mortality and the campaign seeks to create a wave of awareness about actions taken to reduce mortality around the world. Science and technology play a vital role in providing societies with the tools to anticipate and effectively tackle disasters. This is the aim of the I-REACT project, which is presented on the occasion of the International Day for Disaster Reduction with the launch of its promotional video.

Funded by the European Union’s Horizon 2020 Framework Programme for Research and Innovation (H2020-DRS-01-2015), the I-REACT project aims to provide a crucial tool for the prevention and management of disasters. I-REACT will be the first European-wide platform to integrate emergency management data coming from multiple sources and at real time, allowing citizens, civil protection services and policymakers to effectively prevent and react against disasters.

The project is coordinated by the Istituto Superiore Mario Boella (ISMB) of Turin. As a contributor to I-REACT, UNESCO through its Regional Bureau for Science

and Culture in Europe, in cooperation with the Disaster Risk Reduction and Resilience Section on Earth Sciences and Geo-Hazards, has since the early phase of the project facilitated the interface of its technological and institutional-policy components.

In addition to the user requirements specification, UNESCO has helped select the international advisor board of experts, providing feedbacks and vision to the project’s technical partners responsible for the design and development of the system. Insights are also given on how to bridge the existing gap between innovative solutions and end-users in the field of DRR.

By coordinating the international cooperation package of the I-REACT project, UNESCO works side by side with the civil protection departments of selected European member states. It builds cooperation with United Nations (UN) sister organisations and their programmes, designed in support of new international strategies for DRR and in response to the international humanitarian crisis. The objective is to enhance dissemination activities capacity, share achievements and look for possible synergies with the global communities of potential end-users, scientific and technological communities and the private sector.

1 PREVENTION
ADVANCED ANALYSIS SYSTEM

I-REACT will provide greater emergency anticipation through accurate weather forecasts that, coupled with historical knowledge, spatial and real-time, crowdsourced reports, and social media information will allow predicting extreme weather events.

2 PREPAREDNESS
EARLY WARNING SYSTEM

To allow people to react to emergency situations, I-REACT will monitor existing emergency management services, extract data from satellite earth observations, analyse data from social media streams, and develop a cross-platform application for mobile devices to report incidences and provide awareness information.

3 RESPONSE
EMERGENCY RESPONSE SYSTEM

I-REACT will integrate all available information sources to provide a fast and accurate status assessment. To improve the reaction speed, smart glasses will be provided to field responders to allow them to receive information instantly, without using their hands. I-REACT will allow decision makers at control centres to send real-time instructions to responders and also send warnings to citizens.

ONLINE GRAPHICAL DASHBOARD

- Simulated scenarios
- Real-time information
- Historical data
- Decision support system

TECHNOLOGIES

- Social Media data streams:** I-REACT will implement a system to extract valuable information about ongoing disasters from the messages published on Twitter.
- Big Data:** I-REACT will integrate several open data sources coupled with all the information the own reporting system will provide.
- Augmented Reality:** Smart glasses will be provided to professionals, who will be able to visualize real-time information and submit reports without using their hands (speech to text).
- Wearables:** To improve geo-targeted information, advanced positioning systems with a Galileo ready receiver or SBAS/GDAAS will achieve better accuracy.
- Earth Observation:** Satellite networks (Copernicus Sentinel-1 and Sentinel-2) will be used to obtain direct real-time information and maps.
- Unmanned Aerial Vehicles (UAV):** Will provide real-time contextual information of affected areas.

THE PROJECT IN NUMBERS

- 3 COUNTRIES
- 12 SME's
- 3 Research centers
- 2 Universities
- 2 Public Companies/Institutes
- 1 UN body
- 2016
- 2017
- 2018
- 2019

FUNDED BY: THE EUROPEAN COMMISSION, SECURE SOCIETY WORK PROGRAMME (DRS-1-2015)

Italy: Austria, United Kingdom, Norway, Finland, Serbia

AFRICA BACKS ACTION ON SENDAI



Africa's Fifth High Level Meeting on Disaster Risk Reduction

Government ministers, heads of delegation and national disaster management agencies from 47 African countries agreed on a strategic plan to align disaster risk reduction with the priorities and targets of the global plan to reduce disaster losses, the Sendai Framework for Disaster Risk Reduction on 25 November 2016.

They also agreed to forward the Mauritius Declaration, a statement of strong political commitment, for adoption at the African Union Summit in January 2017. The declaration calls for implementation of the programme of action and the allocation of budgetary support to disaster risk reduction. The programme of action contains specific commitments to the seven targets of the Sendai Framework including the achievement of substantial reductions in disaster-related mortality, numbers of people affected by disasters, economic losses and damage to critical infrastructure.

Africa has also adopted five additional targets of its own to augment action on disaster risk reduction including integration of DRR in school curricula, making DRR part of sustainable development planning, increasing domestic spending on DRR, expanding the number of countries testing their preparedness plans and increasing the number of partnerships for knowledge management.

Opening Africa's Fifth High Level Meeting on Disaster Risk Reduction, the acting prime minister of the host country Mauritius, Xavier-Luc Duval, said that the week's consultations needed to culminate in a strong programme of action for reducing disaster losses and a common African position for next year's Global Platform on Disaster Risk Reduction in Mexico.

Duval said, "It is time for the region to join its forces to protect the lives and livelihoods of the country, our infrastructure and our economies. I strongly believe that the time has come to set up a regional mechanism for cooperation within regional agencies like Southern African Development Community (SADC), Common Market for Eastern and Southern Africa (COMESA), Intergovernmental Oceanographic Commission (UNESCO) in order to react with greater efficiency."

He listed several measures undertaken by Mauritius to invest in resilience and to strengthen disaster risk governance. These included the National Disaster Risk Reduction and Management Act 2016 and the setting up of the national disaster risk reduction and management council and committees at local government level.

Speaking on behalf of the chair of the SADC, King Swati III of Swaziland,

South African government minister and SADC deputy chair, David van Rooyen, said the importance of the week's discussions were underlined by the current humanitarian emergency across the region.

Van Rooyen said, "The severity of the El Niño induced crisis has resulted in a severe drought and overwhelmed the disaster preparedness capacity in all affected member states." SADC has launched an appeal for US\$2,9 billion to meet the needs of about 40 million vulnerable people out of a total population of 257 million people. SADC has established a regional DRR unit and programme.

Minister Van Rooyen concluded, "It is encouraging that the proposed way forward from this meeting will enable us to give adequate policy guidance to our member states towards building resilience and sustainable development for the region."

African union commissioner, Tumusiime Rhoda Peace, commissioner for rural economy and agriculture, speaking at what she said would be her last such meeting said she was satisfied to see the great progress now being made in disaster risk reduction with an increased level of interest at government level.

Peace reaffirmed the commitment of the African Union Commission to support countries in the implementation of the Sendai Framework. "Our political leadership remains committed. We look forward to continuing with the excellent collaboration we have been having with Member States, the regional economic communities and all our partners in advancing the disaster risk reduction agenda in our continent," she said.

Alain Wong, minister for the environment welcomed the unanimous adoption of both the programme of action and the Mauritius Declaration which he said amounted to an ambitious agenda of shared commitments, which need to translate into concrete actions.

Mexican ambassador to Mauritius, Mauricio Escanero, congratulated the meeting on the successful outcome and looked forward to the region's full participation in the Global Platform for Disaster Risk Reduction in Cancun, Mexico in May 2017. 🇲🇵

#IDDR2016: BAN KI-MOON SAYS NEW DISASTER MORTALITY REPORT A "DAMNING INDICTMENT OF INEQUALITY"

Analysis of twenty years of data on 7 056 disaster events in which 1,35 million people died, shows that earthquakes and tsunamis are the biggest killers overall, followed closely by climate-related disasters and 90 percent of disaster deaths occur in low and middle-income countries. The report, "Poverty and death: disaster mortality 1996 - 2015" was issued on 13 October 2016, on International Day for Disaster Reduction, in support of a campaign to reduce global disaster mortality especially in poor communities.

The United Nations Secretary-General, Ban Ki-moon, described the report as "a damning indictment of inequality. High income countries suffer huge economic losses in disasters but people in low income countries pay with their lives. On this International Day for Disaster Reduction, I call on all governments to work with civil society and the private sector to move from managing disasters to managing risk. Let us move from a culture of reaction to one of prevention and build resilience by reducing loss of life."

Death tolls in disasters are directly related to income and development levels. Low and middle income countries accounted for 1 221 490 of the overall 20-year death toll.

Low income Haiti, which has suffered a devastating earthquake in 2010, three years of drought fuelled by El Niño and Hurricane Matthew, lost more lives to natural hazards than any other country both in absolute terms and relative to size of population.

No high-income countries appear on the list of top ten countries for disaster deaths, which are topped by Haiti, 229 699; Indonesia, 182 136 and Myanmar, 139 515.

All three suffered the impact of the three mega-disasters of the last twenty years: the Haitian earthquake, 2010; the Indian Ocean Tsunami, 2004 and Cyclone Nargis, 2008. Other countries in the top ten are China, 123 937; India, 97 691; Pakistan, 85 400; Russian Federation, 58 545; Sri Lanka, 36 433; Iran, 32 181 and Venezuela, 30 319.



The new report, Poverty and Death: Disaster Mortality 1996-2015, is a "damning indictment of inequality" according the UN Secretary-General Ban Ki-moon

High income countries do figure in a list of the twenty most deadly disasters of the last 20 years because of the 2003 heatwave across Europe, which accounted for large loss of life in Italy, 20 089; France, 19 490; Spain, 15 090 and Germany, 9 355. Japan also figures on the list because of the 2011 earthquake and tsunami, which caused 19 846 deaths, according to the EM-DAT database maintained by the Centre for the Epidemiology of Disasters (CRED) based at the University of Louvain, Belgium.

Climate change

With three weeks to go before the COP22 Climate Conference in Marrakech, the analysis highlights that the number of weather and climate-related disasters more than doubled over the past 40 years, accounting for 6 391 events in 1996 - 2015, up from 3 017 (1976 - 1995).

Robert Glasser, the UN Secretary-General's Special Representative for Disaster Risk Reduction, said, "The vast majority of climate-related deaths occur in low and middle-income countries, which contribute least to greenhouse gas emissions. These countries also bear the brunt

of earthquake deaths. Earthquakes and tsunamis caused 56 percent of total global disaster mortality over the last twenty years but in 15 of those 20 years the greatest loss of life was due to extreme weather events."

Dr Debarati Guha-Sapir, head of CRED, commented, "These mortality statistics have implications for the achievement of the sustainable development goals. Disaster deaths are a strong indication for poverty and under-development and 90 percent of disaster deaths happen in low and middle-income countries. These statistics are an indicator of overall trends; they do not present the full picture as there are gaps in the reporting on disaster mortality particularly for heatwaves, which have become much more prevalent over the last twenty years. The statistical trend shows that on average 327 people died per disaster in low income countries in the past 20 years, almost five times more than the average toll in high-income countries where economic losses are higher but systems are in place for early warnings and better preparedness." 🌍

NEPAL EARTHQUAKE RESPONSE OFFERS LESSONS FOR FUTURE DISASTERS



After a devastating 7.8-magnitude earthquake in Nepal on 25 April 2015 killed 8 000 people, injured close to 25 000 and destroyed or damaged 500 000 homes, the international community rushed in to help. Governments and relief organisations from 23 countries sent scores of medical and military personnel, disaster response teams, mountaineers, engineers and aid workers.

However, well-meaning though it was the huge influx of helpers actually complicated relief efforts in the small South Asian nation, which had only a one-runway airport in its capital city, Kathmandu and just a handful of helicopters available to transport relief workers to remote areas where many of the injured were located.

That issue and other lessons learned from the Nepal earthquake were the focus of a day-long symposium at Harvard TH Chan School of Public Health in mid-September. At the symposium, which filled Kresge G1 with faculty, students, policymakers, disaster response experts and members of the Boston-area Nepali community, panellists talked about providing relief after a disaster and managing it effectively; about rebuilding; about the role of the media and technology during disasters and about how to prepare for future disasters.

In her opening remarks, Harvard Chan School Dean Michelle Williams praised the efforts of the Harvard Chan Students for Nepal, a group focused on health issues in Nepal and in promoting understanding about the country, who moved quickly after the earthquake to support relief efforts and work toward improving and sustaining the public

health infrastructure in Nepal. Students for Nepal president Elina Pradhan said that, after the earthquake, the group connected with Nepali students across Boston and throughout the United States to share information and raise funds.

Too much support?

In the days immediately after the earthquake, Nepal received a huge wave of international support, “quite a bit of it unexpected, with not a little duplication of effort,” said Arjun Karki, Nepal Ambassador to the US. In some cases; the international support displaced local efforts. “A small amount of support might have been much more effective,” he said.

“There were too many responders in a country that was not able to handle and control the surge of people,” added Jennifer Leaning, director of the FXB Centre for Health and Human Rights at Harvard Chan School. “Many if not all of them were utterly well meaning and most of them were very skilled but the problem was that they saturated Kathmandu.” Getting relief workers up the mountainsides, where most of the dead and injured were located, posed further challenges. “The transport capacities were totally overwhelmed,” said Leaning. About three weeks after the earthquake, the government took the unusual step of not allowing any more foreign workers into the country to help.

Fifty-three international search-and-rescue teams travelled to Nepal after the earthquake but in the end they were responsible for pulling just 19 survivors out of the rubble. Most lives were saved by the country’s army and its people, said Vincenzo Bollettino, director of

the Harvard Humanitarian Initiative’s Resilient Communities Programme, who went to Nepal after the earthquake to help with civil-military coordination. Bollettino said it will be important in the future to consider the challenges and costs of having too many relief teams helping all at once after disasters.

With reconstruction costs in Nepal estimated at \$8 billion, a whopping 40 percent of the country’s total gross domestic product of \$20 billion, the allocation of aid is a crucial consideration, speakers said. Emily Troutman, an independent journalist who wrote extensively about the post-disaster humanitarian response in Nepal, said more work needs to be done to direct relief funds where they’re most needed. Several panellists noted that only \$1.8 billion out of a total of \$4.2 billion in pledged international aid has actually been received in Nepal. Brabim Kumar, immediate past president of the Association of Youth Organisations Nepal (AYON) and cofounder of the Nepal Policy Centre and executive member of Equal Access Nepal, lamented the fact that government-funded rebuilding efforts have been hampered by red tape, so much so that some Nepalese have stopped waiting to receive promised reconstruction funds and have started rebuilding their homes themselves.

Silver lining

Several speakers acknowledged that the earthquake could have been much more deadly had its epicentre been in Nepal’s heavily-populated capital, Kathmandu or had the Saturday quake hit on a weekday, when many more people would have been inside office buildings and schools.

Panellists also praised grassroots efforts in Nepal that provided valuable support after the earthquake. A crowdsourced platform called Quakemap matched people displaced or affected by the quake with relief efforts. Another organisation, Act4Quake, a national youth-led campaign created by AYON and other youth groups in Nepal, encouraged young people in the country to help with the relief effort. Kumar said that Act4Quake was able to help more than 16 000 families affected by the disaster.

In the wake of the experience in Nepal, the World Health Organisation has established a registry to help vet global emergency medical teams and to better coordinate their efforts, Leaning said. 🇳🇵



DMISA ANNUAL GENERAL MEETING HELD IN RAWSONVILLE

The 2016-2018 DMISA Council

The Disaster Management Institute of Southern Africa held its 32nd annual general meeting post the annual conference in Rawsonville, Western Cape on 23 September 2016. The new president, Bafana Alfred Mazibuko, was inaugurated and the new deputy president, Mduduzi Lancelot (Mdu) Nxumalo, elected. Mazibuko takes over the reins from now immediate past president, Dr Johan Minnie, after his successful two-year term. Pat Adams was re-elected as chairperson of the executive committee (EXCO).

The DMISA councillors for the 2016 to 2018 term are:

- Mr BA Mazibuko (president)
- Mr M Nxumalo (deputy-president)
- Dr JA Minnie (immediate past president)
- Mr P Adams (chairperson: executive committee)



Dr Johan Minnie handing over the reins to Bafana Mazibuko

- Mr SW Carstens (member: executive committee)
- Mr OH Becker (member: executive committee)
- Ms M Nohashe (member: executive committee)
- Dr M Reddy
- Ms A Bruwer

- Mr FJ Heystek
- Mr AR Kesten
- Mr S Robbertze
- Ms ES Tsebe
- Mr JJ Steyn
- Ms N Solomons
- Ms BF Swart
- Mr G Otto



Johannes Belle won the Recruiter of the Year Award for 2015-2016



The first certificates were awarded the registered Disaster Management Professionals



Acknowledgement of long service as a councillor awarded to André van Rensburg; 1985 to 2016



Acknowledgement of long service as a councillor awarded to Vonroy de Beer; 2002 to 2016

- ▶ Mr S Losabe
- Mr W Mkhwanazi
- Ms L Mosotho
- Mr TE Motlhale
- Mr T Khupari
- Mr J Belle
- Mr N Rylands
- Mr T H Memani
- Mr V Ngubane

The Recruiter of the Year Award for 2015-2016 was awarded to Johannes A Belle. Long service as councillor included, Andre van Rensburg and Vonroy de Beer, 31 and 14 years respectively.

As disaster management is now recognised as a professional discipline and DMISA has recognised as the professional body for disaster management in South Africa by the South African Qualifications Authority (SAQA), the first certificates were awarded to the following people who registered through DMISA as Disaster Management Professionals:

- Dr JA Minnie
- Mr AR Kesten
- Mr B Mazibuko
- Dr M Reddy

- Ms A Bruwer
- Mr SW Carstens
- Dr E Louw
- Ms O Kunguma
- Mr M Rabe
- Mr JA Belle
- Ms A Ncube
- Ms C Donald
- Dr M Storie
- Prof A Jordaan
- Mr S Shwababa

Congratulations to all and especially to the new team who will be leading DMISA for the next two years!



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DMISA HOLDS ANNUAL CONFERENCE IN RAWSONVILLE



DMISA's 2016 conference was held in Rawsonville in the Breede River Valley

The Disaster Management Institute of Southern Africa (DMISA) held its annual conference in Rawsonville, a small wine growing and farming community in the Breede River Valley of the Western Cape Province on 21 and 22 September 2016. This year's conference was aptly themed, "Climate, disaster risk, early warning and response: re-evaluating resilience" and was evident in the numerous informative presentations and discussions.

Preceding the conference was a consultation session on the Guideline for Disaster Management Plans presented by Jurgens Dyssel of the National Disaster Management Centre (NDMC). This was followed by a practical incident command system (ICS) exercise in which conference attendees actively participated with surprising results. The exercise was organised by the Western Cape Government and facilitated by Colin Deiner. See separate article for details.

A short film festival that focused on safety at sports and recreational events was another first at this year's conference and attendees were able to earn continuing professional development (CPD) points by participating.

Conference

The conference opened with the traditional candle lighting ceremony followed by a heart-warming welcome from Mayor Antoinette Steyn, executive mayor of Breede Valley Municipality. Dr Helena Von Schlicht, executive mayor of Cape Winelands District

Municipality provided an overview of disaster management in the district in her welcoming address. In his absence, Colin Deiner read Minister Anton Bredell's speech, providing insight into the provincial aspects of disaster management in the Western Cape.

Dr Deon Terblanche, director of research at the World Meteorological Organisation (WMO), discussed the "Weather, climate and related service in a changing world. He shared staggering global population figures and provided a historical overview of the WMO. Dr Terblanche said that climate change is all about the weather and is not a theoretical study. He detailed the impact of aerosols on air quality, weather and climate adding that aerosols are a primary driver in climate change with more than seven million people dying prematurely because of pollution. Pollution kills more people globally than disasters. Dr Terblanche added that new technologies in weather and related environmental monitoring observations, computing and social media will play an increasing role in developing and providing services.

Head of the National Disaster Management Centre (NDMC), Ken Terry, provided a national perspective on current disaster management issues in South Africa, presenting an overview of the implementation of Government's response and mitigation plan on drought and water supply shortages. "The drought caused us to work together," said Terry. "Seven provinces declared disasters. The worst affected province

was KwaZulu-Natal." He highlighted the interventions by Government through reprioritisation of available resources from existing programmes within government departments and municipalities. These included water tankers, assistance with livestock feed, drilling and equipping of boreholes and contributions by numerous non-governmental organisations (NGOs) and the private sector as well as stringent measures for water management. Terry furthermore highlighted mitigation measures in the agricultural and water sectors and detailed Government's R10 billion plus bulk infrastructure programmes and projects for 2016/7. ▶



Dr Johan Minnie observing the traditional candle lighting ceremony

► The NDMC's Ané Bruwer provided insight into the impact of the Disaster Management Amendment Act (DMAA), 2015 (Act no 16 of 2015) and the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030, the first major agreement of the post-2015 development agenda, with seven targets and four priorities for action. Bruwer highlighted the salient concepts introduced in DMAA ie:

- Climate change risks and adaptation
- Community based adaptation and eco based approaches
- Women, children and persons with disabilities
- 'Build back better'
- Invest in disaster risk reduction
- Reporting requirements
- Explicit role of local municipalities

"While legislative frameworks are important, effective implementation remains the paramount challenge. Disaster risk is not a theoretical or abstract concept and must be addressed through practical and targeted measures at the local level," said Bruwer.

DMISA's outgoing president, Dr Johan Minnie, discussed the Continuous Professional Development of Disaster Management Practitioners, providing background and the advantages of professionalisation of the profession. "DMISA now is the SAQA approved professional body for Disaster Management," said Dr Minnie. He furthermore described the CPD requirements, categories, examples, credits and governance.

'What every disaster manager should know about climate change response: presenting actionable climate change information for disaster risk reduction' was a presentation done by Daniël Brink and Dave Ogier of Aurecon, who narrated a story illustrating the links between climate change and disaster risk. They also described climate analysis and what the data analysis mean on the ground.

'Weather is what you want; climate is what you get' was the topic Johan Stander of the South African Weather Service's (SAWS) presentation. Stander explained what climate, earth climate and climate change is and the connection between climate and weather. He also detailed the differences between climate prediction and climate projection, adding, "The Intergovernmental Panel on Climate Change (IPCC) states that adaptation and mitigation are complementary strategies for reducing and managing the risks of climate change." Stander provided historic data on South Africa's rainfall from 1904 to 2015, asking "Are we ready for the changes in climate?"

Schalk Carstens and Dr Johan Minnie provided information regarding the 'Implementation of consequence management: An all hazard response' quoting Prof Barney de Villiers in saying, "If you plan for the worst, you can handle everything else". "Consequence-based planning enables coordination and management of disparate entities, entities both experienced and

inexperienced, educated and uninformed of incident command and control into a unified command and multi-agency co-ordination structure," said Carstens. Dr Minnie concluded in saying, "We have to standardise on one globally acceptable response management system that will accommodate all the individual command, control and management systems of all stakeholders." A detailed article will follow in the next edition of Disaster Management Journal.

A panel discussion on 'Hazard classification and resilience, are we focusing on the right problems' followed. The panellists included Melerata Macheli of the NDMC, Dr Eugene Poolman of SAWS, Dr Mal Reddy of Durban University of Technology and Dr Andries Jordaan of the University of the Free State DimTEC. Topics included Hazard classification, IDDR 2016 – reducing disaster mortality, drought classification model, R2A ie anticipate, absorb and reshape and finally re-evaluating resilience. Each panellist had to provide 'What do we need less of' and 'what do we need more of'.

A number of plenary session formed part of the conference. We will provide detailed feedback on some on these, as well as the conference resolutions in future editions of Disaster Management Journal.

A gala dinner sponsored by Santam followed in which it was time for relaxed networking, catching up with old friends and some dancing. We have the video!



Councillor Loekie Niehaus, Cape Winelands District Municipality; Mayor Dr Helena Von Schlicht, executive mayor of Cape Winelands; Mayor Antoinette Steyn, executive mayor of Breede Valley Municipality and Dr Johan Minnie







ICS EXERCISE PRECEDES DMISA 2016 CONFERENCE



Resources used during the exercise

team, the exercise prompted teamwork and role identification resulting in fairly smooth operations and a better understanding of the pressures during a major incident, especially on the incident commander.

Scenario

The scenario simulated a major earthquake measuring 6.8 on the Richter Scale that occurred in the Milnerton area of Cape Town. The quake occurred at 08h30 on a Tuesday morning. The epicentre was in the vicinity of Woodbridge Island and most of the damage occurred to the north of the epicentre. Although buildings in the city centre suffered minimal damage with no loss of life, a multi-storey residential structure collapsed in Milnerton and other incidents occurred at the Koeberg Nuclear Plant and at the Chevron Refinery, respectively.

Koeberg 'incident'

The exercise scenario ensued that the Koeberg Nuclear Power Station experienced damage to a number of extremely hazardous chemical containers, which leaked its contents into the plant. The gasses involved were:

- Sulphuric acid: two 30m3 tanks (99 percent solution)
- Sodium hydroxide liquid solution: two 30m3 tanks
- Ammonia hydroxide: two 20m3 tanks

A large number of employees had been overcome by the chemicals and were all suffering from severe respiratory distress. There were approximately 150 people working in the area. Only 42 people were accounted for. A large number of people were visible from the forward command post; however, they appeared to have lost consciousness and were not moving.

In cooperation with Western Cape Disaster Management, an incident command system (ICS) exercise preceded DMISA's annual conference in Rawsonville in the Western Cape in which conference attendees actively participated with surprising results. The purpose of the exercise was to expose disaster management role players and other conference attendees to the incident command system (ICS) and how it is implemented during a major incident.

The main objectives of the exercise were to:

- Identify types of agency policies and guidelines that influence management of incident or event activities
- Implement processes for developing incident objectives, strategies and tactics
- Introduce steps in transferring and assuming incident command

- Develop and implement incident objectives

Approximately 60 people attended the exercise, which was coordinated by the operations sub-directorate of the Western Cape Disaster Management Centre. There were four incident command stations, which were supervised by Etienne du Toit, Etienne van Bergen, Reinard Geldenhuys and Theo Botha.

- Multi-agency command
- USAR IC (Milnerton incident) administered by Breede Valley Fire Department's, Sewes Pretorius
- Chevron IC administered by Chevron's Michael Clark
- Koeberg station EMS IC

Although off to a slow start as the majority of participants had not been involved in the line functions, ICS or had work together as a



A brief overview of ICS and the exercise scenario was provided by Colin Deiner and his team



Main incident command centre

GAUTENG PDMC COMMEMORATES IDDR 2016

Gauteng Department of Cooperative Governance and Traditional Affairs (CoGTA)'s Provincial Disaster Management Centre (PDMC) together with City of Johannesburg Metropolitan Municipality commemorated the annual International Day for Disaster Reduction (IDDR) in Diepsloot on 20 October 2016.

The objective of the observance of this day is to raise awareness of how people are taking action to reduce the risk to disasters. It is also a day to encourage every citizen to take part in building more disaster resilient communities and nations.

The IDDR is celebrated on 13 October every year as per Resolution 64/200 of the United Nations general assembly, which amongst other deliverables reaffirmed the international strategy for disaster reduction as the primary mechanism for development, promotion and improvement of disaster reduction method.

The 2016 United Nations International Strategy for Disaster Reduction (UNISDR) was commemorated under the theme "Reducing Disaster Mortality" with the slogan, "Live to tell". PDMC focused on edutainment of Grade 5 learners from

three different schools in the Diepsloot area.

Representing PDMC, Von Roy de Beer enlightened the school learners and their educators about the importance of reducing risks to disasters. He also said that every citizen has a role to play in ensuring "we reduce disaster mortality, IDDR is everyone's responsibility. Although it is government's responsibility to execute the strategies, we cannot do it without every one of you; our community members," de Beer said.

Member of the mayoral committee (MMC) for public safety in the city, councillor (Cllr) Michael Sun, encouraged the learners to respect officials in uniform. "Our police officers, traffic officers, fire fighters, emergency management services and also those officials from the province are our heroes. They spend less time with their families so that we can spend more time with ours. Show them respect at all times," Cllr Sun

said, adding that "we are all here today because there are people who make our areas safe." He also reminded the kids that reducing disaster risks is not only a grown-up's responsibility but theirs as well. "You do not know when you might safe someone. It is therefore important that you start learning today. You too can be a hero. Ensure you use all you have learned today to educate others," Cllr Sun concluded.



Provincial Disaster Management Centre (PDMC) team at IDDR 2016 held in Diepsloot



Edutainment organised by PDMC in Diepsloot

Chevron 'incident'

The incident at the Chevron refinery simulated a number of crude oil storage tanks that had ruptured during the quake resulting in a large storage tank fire.

Milnerton 'collapsed structure'

The team, whose area of responsibility was the collapsed building in Milnerton, dealt

with a structure that shook wildly before collapsing in a pancake configuration. Most of the residents of the building were at work or school at the time of the earthquake. There were, however, reports of a large number of pensioners, housewives, domestic workers and pre-school children missing, presumed trapped, in the structure. The team were told that the City of Cape Town Fire and

Rescue Services as well as the Provincial Emergency Medical Services had already responded to the incident. The Western Cape Provincial Urban Search and Rescue Team also mobilised and was en route to the incident.

A debriefing session concluded the exercise, which included a 'press conference'.



The USAR incident command



The PIOs were constantly bombarded by the 'media'

CITY OF CAPE TOWN

DISASTER RISK MANAGEMENT CENTRE RAISES AWARENESS ON INTERNATIONAL DAY FOR DISASTER REDUCTION



City of Cape Town mayoral committee member for safety and security, Alderman JP Smith at Silukhanyo Primary School

The City of Cape Town's Disaster Risk Management Centre and Fire and Rescue Service on 13 October 2016 conducted a public awareness session of Asanda Village in Strand, focusing on the dangers of fires in informal settlements. This included a fire and life safety programme and a vehicle display.

The theme for International Day for Disaster Reduction this year is 'Live to Tell' and the city educated residents and handed out equipment with the aim of preventing fires and disasters. Teams distributed handheld fire extinguishers, fire blankets, solar-powered lamps and warning devices such as horns to backyard residents at risk in the area.

Each year, the summer season sees an increase in the number of informal household structure fires across the city and too often these fires result

in the loss of lives and homes. The City of Cape Town's Disaster Risk Management Centre, together with the fire and rescue service, conducts more than 800 fire safety awareness sessions and educational campaigns per year.

These sessions focus on residents who live in informal settlements or in backyards, alerting them to the dangers of fire, identifying potential hazards and preventative measures, as well as how the community can work to reduce the risk of fires. This forms part of the City of Cape Town's commitment to creating a safe city, which seeks to identify, prevent or reduce the occurrence of disasters and soften the impact of hazards that cannot be prevented.

Despite the City of Cape Town best efforts, there are still far too many devastating fires that are caused by negligent and careless behaviour

and could thus have been avoided. According to the city's records, 131 people died as a result of fires in informal settlements last year.

Therefore the focus is on educating residents from a young age. Learners from Silukhanyo Primary School in Nomzamo were part of the awareness session.

"Empowering children in terms of fire safety is crucial in the prevention and control of fires. There more people know the better. This ensures that residents of all ages are prepared and know what do if a fire breaks out," said the City of Cape Town mayoral committee member for safety and security, Alderman JP Smith. "Vulnerable residents are frequently the victims of fires and suffer the worst consequences. The City of Cape Town will continue to intensify efforts to ensure that residents living in informal settlements are safe." 🇿🇦

UN NAMIBIA AND GRN

RAISE AWARENESS AT IDDR 2016 COMMEMORATION IN OPUWO



The United Nations (UN) in Namibia in partnership with the office of the prime minister (OPM), the directorate of disaster risk management (DDRM) and the Kunene regional council commemorated the International Day

for Disaster Reduction (IDDR) in Opuwo, Kunene Region on 13 October 2016.

Under the theme 'Live to tell: Raising Awareness and Reducing Mortality', the public, traditional authorities

and other stakeholders gathered to commemorate the IDDR at the Stadium in Opuwo and to learn about disaster risk management in Namibia and the importance of protecting Namibia's people from disaster.



United Nations (UN) in Namibia with the office of the prime minister (OPM), the directorate of disaster risk management (DDRM) and the Kunene regional council

The Kunene region has been hit hard by disasters, namely drought, veld fires and flash flooding. Opening the event, the Governor of Kunene region, Honourable (Hon) Angelika Muharukua, said that climate change and disaster are real and citing that eight people had lost their lives to flooding in Opuwo this year. For this reason, she called for support in addressing disaster in the region.

Disaster also threatens the lives of people across the country. Kiki Gbeho, the United Nations resident representative (UNRC) to Namibia and resident representative to the United Nations Development Programme (UNDP), cited that Namibia is experiencing its fourth year of drought and that approximately 600 000 people have been affected.

Highlighting the importance of disaster management in achieving development ▶

SARAH BAARTMAN

DISTRICT MUNICIPALITY HANDED OVER A HOUSE IN PEARSTON



Meitjie Jordaan received the first house of this project

The Disaster Management Centre of the Sarah Baartman District Municipality has implemented a 'disaster risk reduction' project in the Blue Crane Route Local Municipality. The project, operational in Pearston, serves to increase the capacity of communities

and households to minimize the risk and impact of natural disasters.

The Disaster Management Centre appointed a duly accredited training service provider to train 15 young people in community house building, an NQF Level 2

qualification. These young volunteers were expected to build a show-house upon completion of their theoretical course work, while they are also the first in-line for support in the event of houses being blown away by strong winds in the area.

The first house completed as a result of this project has been handed over to Meitjie Jordaan who lost her house during very strong winds. Prior to the handover, the mother of two was brought to tears when asked about her new house. With a tearful smile she said, "I am really happy that the Sarah Baartman District Municipality saw a need to provide me with a safe home after suffering for so long. I thought I would eventually meet my creator with no roof over our heads but this project has proved me wrong. I hope this project will continue touching lives in other areas too".

The house was built in only two weeks. The official hand-over took place in the presence of the executive mayor of the Sarah Baartman District Municipality, Khunjuzwa Eunice Kekana on 13 October 2016. 🇳🇦

► agendas, Gbeho said, "We will not attain our local, national and international development agendas if we fail to prepare and respond to disasters adequately."

She continued, saying that there is an urgent need to increase awareness of disaster risk and to build resilience at the community level.

Disaster raises the risk for health-related issues, including the lack of access to clean water and sanitation, dehydration and malnutrition. For this reason, various companies handed over disaster relief items to Kunene region. The Better Days Foundation donated water containers as a way to prevent dehydration and to promote the use of reusable water bottles.

As an introduction to a donation from Namsov Fishing Enterprise, the deputy minister of fisheries and marine resources, Hon Samuel Ankama Namsov explained the opportunities that the fishing industry provides; employment, food security, products for exportation, etc.

Continuing, Hon Ankama emphasised the importance of sharing these opportunities with all Namibians. "Let us remember that the fish in our oceans

belongs to all of Namibia and hence should benefit all of Namibia," he said. With an introduction by the governor of the Kunene region, the keynote speaker the deputy prime minister and minister of international relations and cooperation, Hon Netumbo Nandi-Ndaitwah reiterated the importance of strengthening regions to be the first line of defence and that, "We are being called to put in place mechanisms for people to survive and tell their story".

Hon Nandi-Ndaitwah emphasised that when it comes to disaster, "You always have to be prepared because you never know when disaster will strike." Citing various programmes and agreements aimed at disaster reduction, she explained that the Sendai Framework for Disaster Reduction has four main priorities; understanding disaster risk, strengthening disaster risk governance to manage disaster risk, investing in disaster risk reduction for resilience and enhancing disaster preparedness for effective response and to 'Build Back Better' in recovery, rehabilitation and reconstruction.

Hon Nandi-Ndaitwah then shared her appreciation of the UN's support, how to move forward in terms of disaster

risk management and expressed the importance of strengthening coordination. Likewise, she explained that partnerships are key to success and through working together, "We must build national capacities to effectively mitigate disaster impact." The commemoration ended with a vote of thanks by his worship, Albert Tjiuma, mayor of Opuwo and a skit about cholera performed by ministry of health and social services.

Following the proceedings, which included various cultural performances, there was a small exhibition where the International Organisation for Migration (IOM) displayed its publications regarding disaster risk management. Besides learning about disaster reduction at the IDDR commemoration and through the exhibition, the UN system in Namibia in partnership with the government of the Republic of Namibia educated the public through its flash #floodingwithfacts social media campaign as a lead up to the day.

The UN system will continue focusing its efforts in aiding the Government of the Republic of Namibia in disaster reduction and ensuring that all Namibians can stand resilient in the face of drought and 'live to tell.' 🇳🇦

INTERNATIONAL DAY FOR DISASTER REDUCTION MARKED IN NANYUKI, KENYA

As the world marks the International Day for Disaster Reduction (IDDR), Kenya will make a major declaration national disaster risk reduction symposium declaration in Nanyuki on the country's preparedness.

This comes in the wake of the country's push to have a legal framework of managing disasters. Disaster management stakeholders have been attending the fourth National symposium for Disaster Reduction, 11 to 12 October 2016 at the Sportman's Arms Hotel in Nanyuki. This is the fourth symposium bringing together government and partners to assess the country's preparedness to handle disasters.

This is especially key with the new threat of terrorism, which has threatened peace in the leading East African economy. The World Bank has also revealed that Kenya can now access a special disaster fund if it puts in place a legal framework to manage disasters. The fund, technically known as Catastrophe Draw Down Option (Cat DDO), is only open to middle-income countries and Kenya is eligible to access the funds if it puts its house in order.

The World Bank announced it has started working with the Government of Kenya to set up the 'contingent financing instrument for disaster response, a development policy loan with a Catastrophe Draw-Down Option'. Thanks to its imminent transition to middle income country, Kenya will be the second African country to access this financial product.

According to World Bank, by providing rapid liquidity in the event of a national emergency, the Cat DDO will greatly enhance the government's ability to respond to crises," a bank official said.

This work is part of a broader engagement on resilience between the World Bank and the Government of Kenya and complements national efforts to enhance resilience, including the proposed Disaster Risk Management Bill sponsored by Honourable Tiyah Galgalo, member of parliament for Isiolo County.

The Cat DDO is like a credit card that you only use if need be. Through the facility Kenya can access between US\$100million and US\$150million meaning in case of a disaster the country can use the funds to rebuild without having to interfere with its development budget.

"At the World Bank, we are pleased to be working to set up a contingent credit line that will provide the Government access to much needed financial resources in the aftermath of a disaster. Ultimately, this will reduce the negative impacts of disasters on the people and economy of Kenya," says Eric Dickson, senior disaster risk management specialist at the World Bank and project lead for the Cat DDO.

"The establishment of a clearly defined institutional structure for disaster risk management is key for Kenya as it steps up efforts to enhance resilience to the growing impacts of disasters" said Francis Muraya, senior disaster risk management specialist at the World Bank.

"By creating a platform for improved coordination among the various actors working on risk management and crisis response, the proposed Bill will be instrumental in the successful implementation of the new contingent loan we are preparing," adds Muraya.

Muraya said Kenya should swiftly take up the opportunity as an insurance against catastrophic disasters. "When a country is hit by a major disaster, World Bank offers liquidity for it to rebuild and stabilise," explains Muraya. In Africa, it is only Seychelles that has accessed the funds and Cape Verde is in the process of signing up.

Other countries that have benefited from this facility include the Philippines. "This is good for Kenya but it must have a legal framework on how to handle disasters to access this financial instrument," adds Muraya.

Kenya is no longer considered a developing country but a middle income country following the rebasing of its gross domestic profit (GDP). Already Isiolo County women representative, Tiyah Ali Galgalo, is sponsoring a bill that will see Kenya edge closer to fulfilling the requirements.

The Disaster Risk Management Bill 2016 is at national assembly committees' stage, after which it will become law if it sails through the remaining process. The bill envisions establishing a national disaster risk management authority and a special fund to replace the current system where many agencies are involved in handling disasters in an uncoordinated manner.

A key item in the declaration is to push for the bill to be passed and secure the



country's opportunity to access the World Bank's CAT DDO facility.

According to Colonel (Col) Nathan Kigotho, director, National Disaster Operations Centre (NDOC), ministry of interior and coordination of national government, the bill is a welcome move, which is long overdue. It will see Kenya access the World Bank disaster kitty (CAT DDO), which will act like an insurance policy against major disasters.

"We now have a policy and the bill, which must be presented to the cabinet for approval so that the interior ministry can forward it to Parliament for debate and passing." The national disaster management authority will be in a good position to handle all stages of disaster right from mitigation, response and recovery.

Currently there is no proper funding for preparedness and NDOC often responds to disasters when it is often too late.

"We do not have a proper organisational framework. Our centre is inadequate since we have to depend on other players whom we have to mobilise," he adds. "The bill creates an organisational structure with budget from exchequer, as it stands NDOC gets financing from the Interior Ministry and the allocation is never enough. The Bill will also show what Counties' roles and responsibilities are in management of disasters," says Col Kigotho.

According to the Kenyan Constitution, management of disasters is a shared responsibility between the national and county governments. 🇰🇪

UPCOMING EVENTS

NOVEMBER 2016 - JUNE 2017

7 – 18 November 2016

22nd Conference of the Parties to the UNFCCC (COP 22)

To date, 195 countries have submitted their instruments of ratification. These countries meet once a year, during two weeks, in order to evaluate the application of the convention and develop the negotiation process between the Parties in front of new commitments.

Venue: Marrakesh, Morocco

For more information visit: <http://newsroom.unfccc.int/>

16 – 17 November 2016

First IFIP Conference on Information Technology in Disaster Risk Reduction

The conference provides an international forum for researchers and practitioners to present their latest R&D findings and innovations. The conference is especially focused on the various IT aspects and challenges of coping with disaster risk reduction. ITDDR-2016 invites experts, researchers, academicians and all other who are interested to disseminate their work. The conference establishes an academic environment that fosters the dialogue and exchange of ideas between different levels of academic, research, business and public communities.

Venue: University of National and World Economy, Sofia, Bulgaria

For more information visit:

www.unisdr.org/we/inform/events/48740

14 – 18 November 2016

Third Session of the Open-ended Intergovernmental Expert Working Group (OIEWG) on Terminology and Indicators Relating to Disaster Risk Reduction

The third and final formal session of the open-ended intergovernmental expert working group (OIEWG) on indicators and terminology relating to disaster risk reduction will be held in Geneva at the Palais des Nations.

Venue: Geneva, Switzerland

For more information visit: www.unisdr.org/we/inform/events/50683

22 – 25 November 2016

6th Session of Africa Regional Platform and 5th High-Level Meeting on Disaster Risk Reduction

Representatives of African countries, stakeholder groups and development and humanitarian partners will gather for the 6th Session of the Africa Regional Platform, and the 5th High Level Meeting on Disaster Risk Reduction. The Platform and High Level Meeting will be hosted by the Government of Mauritius, in cooperation with the African Union Commission, the SADC Secretariat and the UN Office for Disaster Risk Reduction (UNISDR).

Venue: Mauritius

For more information visit: www.unisdr.org/conferences/2016/afpr

13 – 15 December 2016

3rd International Conference on Information and Communication Technologies for Disaster Management

ICT-DM'2016 aims to bring together academics and practitioners who are involved in emergency services, ad hoc planning and disaster management and recovery, in order to learn about the latest research developments, share experiences and information about this area and develop recommendations.

Venue: Vienna, Austria

For more information visit: www.unisdr.org/we/inform/events/48078

13 – 16 December 2016

Fifth Session of Central Africa Regional Platform on Disaster Risks Reduction

Assessment of identified priority actions for the implementation of the Sendai Framework, through national legislations in Central Africa.

Venue: Mount Febe Hotel, Cameroon

For more information visit: www.unisdr.org/we/inform/events/50869

13 – 14 January 2017

19th International Conference on Disaster and Emergency Management (ICDEM 2017)

The ICDEM 2017: 19th International Conference on Disaster and Emergency Management aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Disaster and Emergency Management. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Disaster and Emergency Management.

Venue: Zurich, Swiss

For more information visit:

www.waset.org/conference/2017/01/zurich/ICDEM

25 – 28 April 2017

WADEM Congress on Disaster and Emergency Medicine 2017

The Congress will be WADEM's 20th biennial meeting of global experts to exchange knowledge and best practices on prehospital and in-hospital emergency medical care, disaster health and response, and emergency public health and safety.

Venue: Toronto, Canada

For more information visit:

wadem.org/congress/toronto-2017/

1 – 3 June 2017

Natural Hazards and Disaster Management 2017

The conference provides a forum for the exchange of information between academics and practitioners, and a venue for presentation of the latest developments. The corresponding volume of WIT Transactions on Ecology and the Environment containing the papers presented at the meeting has been published in paper and digital format and widely distributed around the world.

Venue: Osaka, Japan

For more information visit:

www.naturalhazards.conferenceseries.com/

7 – 9 June 2017

5th International Conference on Disaster Management and Human Health: Reducing Risk, Improving Outcomes

The conference provides a forum for the exchange of information between academics and practitioners, and a venue for presentation of the latest developments. The corresponding volume of WIT Transactions on Ecology and the Environment containing the papers presented at the meeting has been published in paper and digital format and widely distributed around the world.

Venue: Seville, Spain

For more information visit: www.wessex.ac.uk/conferences/2017/disaster-management-2017

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