# JICA Ex-Participants Alumni of Kenya, JEPAK



# Annual National Conference, Held at Pan Afric Hotel on the 21<sup>st</sup> of November 2013

Report of the Conference Proceedings and Recommendations

## **Table of Contents**

Foreword3	3
Welcome Remarks by the Chairman	4
Keynote Address by the Patron	5
Message from JICA Chief Representative	.6
Challenges in Implementation and Enforcement of Traffic Rules7	,
Strengthening of Capacity on Road Maintenance and Management9	)
Car Dealers' Point of View on Road Safety1	1
Road Safety - Matatu Welfare Association's point of view1	2
Case Studies1	4
1 Easy Coach	
2 2NK SACCO Ltd.	
Road Safety Standards16	5
Weather Conditions and their Effect on Road Safety18	}
Recommendations and Way Forward19	7
List of Delegates2	1

### **Abbreviations**

ASALs - Arid and Semi-Arid Lands JEPAK – JICA Ex-participants Alumni of Kenya JICA - Japan International Cooperation Agency KABA - Kenya Auto Bazaar Association **KEBS** -Kenya Bureau of Standards NRSC - National Road Safety Committee NTSA - National Transport and Safety Authority **PSV – Public Service Vehicle** 

### **Foreword**

It is my great pleasure and privilege to welcome you to JEPAK 2013 Annual National Conference. The theme of this year's conference is "Harnessing safety on our roads". Indeed road accidents have become a matter of great worry and concern in our nation today. These accidents have continued almost unabated to rob families and communities of key bread winners. The loss to the economy as key skills are wasted is huge. We are generally in agreement regarding the major causes of road accidents, among them being; excessive speeds, overloading, bad driving habits, state of the roads, disregard/ disobedience of traffic rules and regulations, corruption and noncompliance with vehicle construction standards, especially PSV. We continue to spend our meager resources on post accidents medical care and support to those affected instead of investing these resources in preventive health and in other areas of national development.

Evidence has shown that when we adhere to traffic rules and regulations, accident can come down significantly. When Legal Notice No. 161 of 2003 was issued and later implemented, for the first 6 months of its strict adherence, road accidents were reduced by about 73%, compared to a similar situation in the previous year. Much as right laws are important, their positive impact will very much depend on their proper implementation and enforcement. Besides, a change of attitude and behaviour by all road users is fundamental in addressing road accidents.

In this conference, I hope we shall, as stakeholders and interested parties engage in a well informed dialogue that would translate into tangible and action oriented recommendations. We intend to present these recommendations to the competent government authorities with a passionate prayer for action NOW. Other countries which had serious road accidents have been able to rise up to the challenge and tamed the carnage. If all of us play our respective roles responsibly, we too can tame this carnage on our roads. The government has to competently lead the way by providing the right environment for this to happen.

**Professor Ratemo Michieka** 

Patron, JEPAK

### Welcome Remarks from the Chairman



The Chairman of JEPAK, Mr. Samuel Kiiru moved the conference to order and called for opening prayers at around 9.40 am. He then proceeded to have those present to make brief self introductions. This done, the chairman officially welcomed the delegates to the 2013 JEPAK Annual National Conference. In his speech, he mentioned that having been founded in 1983, JEPAK is now thirty years old. During those years, it has grown into an organization that is keenly aware of the dynamism of the environment in all areas and continued to make meaningful responses. This is in line with its values of giving back to the society out of the wealth of knowledge and skills gained from the members' respective training and exposure in Japan. JEPAK's strategic plan consists of formulation and implementation of activities anchored on thematic and contemporary issues of national as well as global concern. In this regard, the chairman mentioned in passing the past two years' themes (2011 and 2012) - "Managing Counties in ASALs to Optimum Potential" and "Future of the boy child", respectively. This year's Conference theme is yet another issue of great concern in the country- "Harnessing Safety on our roads". The rising cases of road accidents across the country and the resulting deaths and varying degrees of disablement are a very painful reality of our lives. And yet, the casual manner in which we deal with such is an added worry to our way of dealing with crisis as a nation, we continue to lose lives on our roads that ruthlessly take away family bread winners and key skills needed to drive our economy. The goal of our 2030 vision of moving the nation out of poverty is at great risk if we continue to lose lives and resources on account of road accidents.

Our behaviour on the roads can many times be strange- how about law abiding motorists or road users who are seen as fools by the rest of us, as we blatantly disobey every rule? The whole society is at risk and at fault- the pedestrian, the engineers, contractors, traffic police, driving school instructors, policy makers..a sick and sickening society to boot! Indeed as someone said "it is safer to swim in a crocodile infested river than to drive on a Kenyan road. It is considered as an achievement to drive after drinking". And yet it is possible to reduce our road accidents and their

serious consequences by addressing the major causes of these accidents- high speeds, driving while drunk, not using safety belts and other safety provision by the road users.

Having made those opening comments, the chairman proceeded to invite the delegates to fully participate in the ensuing deliberations with a view to making it possible for the conference to formulate some recommendations that would contribute to road safety in Kenya for all road users.

# **Key Note Address by the Patron**



The patron Professor Ratemo Michieka once again welcomed the delegates to the conference. He mentioned that in his lectures on environmental issues, the aspect of road safety in its entirety forms an important area of concern. The fight against the worrying treads of road carnage and loss of resources must be fought especially by repeated messages and awareness-raising on the scourge. In this regard, therefore, he made a passionate appeal to the press to give this matter the space and dimension it deserves, over and over until the message is driven home effectively. Out of 29 countries researched on by the UK Transport Research Laboratory in 1986, Kenya was ranked 5th in the number of accidents per licensed vehicles. A global status on road safety puts Kenya with the highest road accidents in East Africa. The new and growing motor cycle transport on our roads (about 30,000 now) has presented another huge dimension in road accidents. The major contributors to road accidents have been identified in the order of severity as - speed, drunkenness, poor roads, use of mobile phones, pedestrian, corruption, unroadworthy vehicles, overloading and others. There are very serious defaults on our roads that need mention, such as absence of proper road signage, road painting, pot holes and failure to wear visible clothes at night. Driver motivation and welfare is yet another point to consider. These, if addressed could substantially reduce road accidents. The majority of those killed on our roads continue to be vulnerable road users such as pedestrians, cyclists and passengers. The motor vehicles population has been growing over the last two decades- 1.4 vehicles per 100 people in 1985 to 2.7 per 100 in 2007, thereby raising the ratio of accidents. Statistics show that in Kenya, over 3,000 people, majority in their most active/productive years (15- 45) are killed on our roads every year. More than twice as many are maimed and disabled rendering them incapable of providing for their dependants. The reality of this begins to dawn when you look at its negative impact on the wider family, community and national context. Huge amounts of resources are spent on medical care and support instead of preventive health care and other development issues. The provisions of the Legal Notice No. 161 on the regulation of Public Service Vehicle sub-sector was a positive measure to bring sanity on our roads. Indeed upon its implementation, road accidents were reduced by about 73% during the ensuing 6 months compared to similar situation in the previous year. With the right amount of efforts, we can prevent road accidents and their consequences substantially. For this, we need the right laws and their strict adherence and change of attitude in road use by all. Other countries have done it and so can we. This conference has presented a good opportunity for us to give useful recommendations that can help bring about the desired change to positively address the road carnage.

# Message from JICA Chief Representative, Hideo Eguchi



The message from JICA chief representative was delivered by senior representative Mr. Koji Noda. He expressed his pleasure to be present and participate in this year's JEPAK annual conference and further noted that this year's theme on road safety in Kenya is a fitting one. He observed that this year, JICA is celebrating 50 years of partnership with Kenya even as Kenya celebrates her Jubilee. As an independent government agency, JICA is responsible for the coordination of development assistance on behalf of the government of Japan and the people of Japan. The sphere of these development efforts is that of economic infrastructure, agriculture, human resource, health and environment sectors. Recently, Mr. Hiroshi Kato, the vice President in charge of subsaharan Africa at JICA Headquarters in Tokyo, hosted a luncheon to mark JICAs five decades in Kenya. In attendance were Professor Judy Wakhungu, chief secretary, Ministry of Environment, Water and Natural resources, the alumni, senior government

officials and representatives of various international organizations and the private sector. In his speech, Mr. Kato appreciated the role that JEPAK has continued to play in matters of development in Kenya and consolidation of relations between the two countries. The contribution of JEPAK in terms of skills transfer has had great impact. Turning to the topic of road safety, the representative decried the global traffic accidents of about 1.2 million deaths annually and cited Kenya as having one of the highest cases of road related accidents and deaths in the world- about 3000 every year. The development in the Kenyan road sector, the increasing vehicle population and high driving speed continue to result in serious road accidents. The economic costs to the nation resulting from road accidents is estimated to be around 5% of annual GNP, not counting the emotional and social trauma this creates. In its road development programmes, JICA has inbuilt road safety and maintenance measures that take into account all manner of road users, thereby making the physical infrastructure user friendly. The last 50 years have been a long road for Kenya in matters of development, with remarkable achievements made as well as lessons learnt. He was happy with the existing spirit of "pamoja" uniting Kenya and Japan in close relationship. appreciated the hard work and diligence manifested by the JEPAK leadership, committee and members in the preparation of the Conference.

# **Presentation of Selected Position Papers**

After the opening introductions, overview remarks and messages, the Conference was well prepared to listen and contribute to the selected papers relevant to the theme of the conference. The first part contained four presentations of about 20 minutes each, addressing the challenges of enforcement of traffic rules and road safety aspects as seen from the Kenyan and the Japanese experiences.

# Challenges in the Implementation/Enforcement of Traffic Rules.



This presentation was made by Mr. Charles Keitany, in charge of police patrols, on behalf of the Traffic Commandant. The bulk of his presentation consisted of comparative factual statistics of the years 2010 through 2013, giving breakdowns in terms of fatalities, serious and slight injuries, those involved (drivers, motor cyclists, pedal cyclists, passengers, pillion passengers and pedestrians). These statistics (see table below) tell volumes about the happenings on the Kenyan roads. It is not hard to note the very high numbers of deaths and injuries occasioned to the pedestrians and passengers as compared to the drivers. These figures show a clear accident low year 2012 as compared to all the other years in question- something to prompt a study for some useful lessons.

Break Down of Accidents between 2010 and 2013

Year/ Nature	2010	2011	2012	2013
Fatal	2648	2772	1568	2268
Serious injuries	4482	4045	2030	2624
Slight injuries	2641	1376	508	641
Total	9771	8193	4106	5533
Driver - killed	307	289	179	249
Driver - serious injury	869	799	388	450
Driver - Slight injury	711	472	212	268
Motor cyclist - killed	200	315	173	286
Motor cyclist - serious	648	954	471	660
Motor cyclist - slight	295	262	111	142
Pedal/c killed	240	173	69	122
Pedal/c serious	531	225	118	148
Pedal/c slight	495	96	28	41
Pillion Pax. Killed	126	156	69	137
Pillion/p. serious	569	578	307	413
Pillion/p. slight	273	220	123	131
Pedestrian - killed	1434	1545	931	1305
Pedestrian Serious	2177	1977	1114	1390
Pedestrian Slight	1569	746	309	391

The presentation went on to identify the common causes of road accidents and the resulting deaths and injuries/disabilities on basis of the mode of transport as follows: -

#### **Motor Vehicles:**

- Overloading
- Over-speeding
- Obstruction
- Improper overtaking
- Disregard of road safety precautions
- Deliberate disobedience of the traffic law
- Bad driving habits
- Fatigue due to long hours of driving

#### **Motor Cycles:**

- · Lack of basic driving knowledge/training
- Ignorance of road safety precautions
- Speed
- Overloading
- Poor maintenance of the machine
- Failure to wear safety kits such as helmets
- Failure to wear reflective jackets
- Failure to observe road traffic signs.

On their part the pedestrians are known to be causes of road accidents by failing to obey basic traffic rules such as proper road crossing, wearing reflective clothing at night, using provided crossing points and bridges among others.

In an effort to address these causes, the traffic commandant offered some remedies, some of which are:

- Increased deployment of traffic checks
- Installation and use of speed cameras
- Random inspections
- Strict supervision of road traffic rules by senior officers
- Introduction of mobile traffic courts
- Free clinics for PSV drivers.

# Strengthening of Capacity on Road Maintenance and Management



This presentation was done by three experts from Japan. They were:

Takeshi Suzuki, Ex JICA expert working with Hanshin Expresssway Co. Ltd.

Hiroshi Tsujino, a chief adviser of JICA of Hanshin Expressway Co. Ltd.

Hidetsugu Ikeda, a JICA expert working for Honshu-Shikoku Bridge Expressway Co. Ltd.

The three jointly made three brief presentations that basically revolved around "Strengthening of Capacity on Road- Maintenance and Management". This combined presentation was of a very high technical calibre and relied on experiences of road designs, construction and maintenance in Japan and the ongoing Mombasa southern bypass. It was patently clear from their material presentation that road designs, construction management are anchored on safety, convenience, longevity(durability) and environmental preservation. In other words, good roads must have a human face and be user friendly. The following variables in road soundness were discussed by the presenters.

**Alignment**- both the horizontal and vertical alignments are important for sound foundations. It follows, therefore that when the alignment is not proper the damage has already set in.

**Street Lights**- these are crucial for night driving. Twelve (12) meter high lights with a 40 meter pitch of illumination are recommended.

**Regulatory Signs** for sufficient and timely warning and information are important especially for drivers that may not be familiar with a particular road or section thereof.

**Curve indicators**- curves and especially multiple ones are known to be major causes of traffic accidents.

**Concrete Centre Barriers** are recommended for minimizing serious accidents.

**Bridge Width**- narrow bridges are known to have caused very serious accidents, at times vehicles plunging into rivers.

**Parking Area-** ample and convenient parking areas on the roads with service facilities such as toilets, shops and information for drivers and travelers are recommended.

**Weigh Stations**- for the protection from road damage. These stations should have weigh-in motion system to cut on waiting time and congestion at weigh stations.

The delegates were taken through what should be a well designed road during the construction period, the necessary maintenance phases – preventive repair (high frequency involving minor damage and less expensive) and corrective repair( low frequency involving major damages and more expensive). The lesson here is that preventive repairs are more preferable in reducing the road life cycle cost. The following were presented as important components of a durable and easy to manage road:

**The Road -** consideration regarding both the horizontal and vertical alignment, the junctions, the accelerating( 120m.long allowing speed of 50kph to 80 kph) and decelerating(80m. long allowing speed of 80kph to 50 kph) lanes, railway crossings, slope protection, culverts, parking areas, emergency packing lots and escape lanes.

**Superstructur**e - the type, the span and length, water proofing for slab and deck, the joints and bearings capacities.

**Substructure** - protection from corrosion, corrosion thickness sufficient bearing capacity etc.

**Pavement -** consider the future traffic volumes and heavy truck ratio and modify the surface by use of asphalt.

**Drainage** - consider the effects of rain water and provide mud stoppers and oil trappers among other things.

Other - provision of suitable road signs, markers, lights and other warning equipment.

This presentation revealed very useful lessons on road design, construction and life long management through periodic inspections and repairs. Roads are not an end in themselves but a means to safe driving and use. The manner in which we all use the roads will make that difference between safety and danger to all of us. The Mombasa southern bypass road project will hopefully bring to manifestation the validity of these lessons if the designs presented are anything to go by.

### Car Dealers' Point of View



This was a presentation from car dealers' point of view who have a major interest in this topical issue on our roads. The presenter, Charles Munyori, secretary KABA started by posing a very real (and common) scene he witnessed of a motor cycle overloaded to the extreme. He then went on to give statistics (NRSC) of the major causes of accidents on our roads- 85% human error, 10% mechanical issues, and 5% others. It would be correct to state that with deliberate efforts, it is possible to reduce these accidents by about 95%, thereby saving many lives out of the over 2,400 lives lost

annually through road carnage. The cumulative effects that these accidents cause on families, the country and the economy are hard to describe. He gave what in his view are some intervention measures, top of which is "to reason together". The others are:-

Attitude change, especially in adhering to road regulations;

An adoption of a driver training syllabus, with requirements such as level of education, a guide on who can qualify to be a PSV driver and generally a level of maturity and responsibility;

**Introduction and implementation of high-tech enforcement** of traffic rules without police on the roads- cameras to monitor driver behavior and facilitating undeniable evidence of misconduct:

Cars over 4 years old to mandatorily undergo annual inspection and their status be kept in a central data base as evidence, should it be involved in an accident later;

**Standards of PSV body builders be set** and strictly observed to avoid vehicles with bodies that are out of the original alignment and capacity.

In conclusion, while we expect the government to tackle road safety head on, as road users, we also have a role to play to ensure safety on the roads.

### Matatu Welfare Association's Point of View



This presentation was made by the chairman of the matatu welfare association, Mr. Dickson Mbugua. The association is concerned with interests of the workers in the matatu sub-sector. His presentation mainly addressed the various obstacles to road safety compliance, which he admitted, were a big challenge in our country. Indeed, he suggested that it may require an authoritarian approach to get traffic compliance, giving an example of Uganda where the road indiscipline was worse than in Kenya. He gave the following factors as obstacles to road safety compliance:-

**Driving -** Unlike the internationally (AA) accepted driving syllabus of 35 driving lessons, most driving schools in Kenya teach only 18 lessons. This , according to the presenter amounts to gross under training.

**Testing of Recruit Drivers** - The methodology of testing and determining the driver competence is wanting; we have no driver trainers' training institutions; there is no supervision on the authenticity and efficiency of the process; integrity and transparency is wanting, leading to corrupt practices and we have no specific schools to train PSV personnel.

**Road Furniture/Signage** - Most of our roads lack proper road information/warning in form of furniture and signage. The problem posed by vandalism is a real threat to road safety.

**Bus body Fabricators** - The body builders in collusion with the customers disobey set standards of PSV vehicles.

**Self-Regulation in PSV Sector**- As of now, there is no legal measures to facilitate industry self-regulation.

**Rogue Motorists**- The current methods of addressing road rogues such as hefty fines, most times become counterproductive as it feeds corruption into the system.

**Time lost in courts**- Court proceedings take time and this again encourages corruption on the roads.

He presented several intervention measures that would help improve compliance with traffic regulations, such as:-

Adoption of a Comprehensive Driver Training Syllabus as internationally recognized;

**Specific Training** for PSV personnel;

Periodic Health Checks- especially for the drivers' sight;

Autonomous Driver testing institutions set up;

**Dealing Firmly** with the problem of vandalism of road signs and equipment;

**PSV Body Building Standards** be observed and enforced (recently launched road safety 39001 standards will help);

Establishing Statutory Self-Regulation in PSV sector;

**Taming Road Rogues** through use of social media (e.g. current road hog slot on TV);

**Introduction of Instant** fine tickets:

The full operation of the NTSA.

### **Case Studies:**

## (i) Easy Coach Transporters



This presentation was made by Mr. Kiruki Mwithimbu, a management executive of Easy Coach Transporters. This is a road commuter transporter with a national coverage. The presentation was tailored to highlight road safety tips from the drivers' perspective. The thrust of the message was that the safety of commuters is, all things considered, in the hands of the driver. Easy Coach is now eight years in service and has about 200 drivers, all well trained. The issue of observing safety rules, regulations and ethics on the roads is brought to their attention repeatedly. The following are some of the tips given to the drivers to ensure safety while driving:

Do not over speed even while going downhill;

Do not use mobile phone while driving;

Do not overtake at blind spots;

Before starting the journey ensure that brakes, wipers and lights among other parts are in working order;

Use of indicators- (they do not use any fuel);

Before the next journey, make sure you rest sufficiently;

Before you start the journey, advice passengers to buckle their safety belts;

No "kikapu" - an adopted business practice of not picking passengers on the way, enhancing passengers' safety;

Give way to those who want to overtake – (they will bless you for that);

Respect other road users- (God will reward you for that).

For effective management and implementation of these safety provisions and requirements, the company has installed and continues to improve on high tech equipment such as GPS on line control to monitor speed and location of the vehicle. The company operates an 8 hours driving shift (change of drivers) to reduce fatigue, one of the major causes of road accidents. As a result of constant training, counseling and concern for the drivers motivation (rewarding good performance)/wellbeing, the company's labour turnover is very low.

### (ii) 2NK SACCO



The presenter, Mr. Paul Nguthiru is the Treasurer of 2NK Sacco, a passenger transporter with a wide national coverage. The Sacco was started in 1994 with a membership of sixty passenger vehicles. Currently, the membership stands at 700 with about 750 operating vehicles. The purpose was and still is, to bring order in this sector. Among the safety measures and concerns of the Sacco are:

Drivers training on defensive driving;

Observance of the code of conduct, road courtesy and discipline;

Observance of the traffic regulations;

Basic knowledge on first aid and minor vehicle repairs;

Ensure proper use of safety belts by all passengers and the driver;

Ensure all round soundness of the vehicle, especially before the start of a journey.

Customer care/safety is our business.

To manage and monitor these requirements, the Sacco has put in place the following measures:

Drivers vetting (recruitment/evaluation) and disciplinary committees;

Hot line numbers for reporting driver misconduct;

Vehicle tracking system in all vehicles to monitor speed and misuse;

At the end of these two case studies, there was a general consensus that though challenges in the road passenger transport are there, yet with good will and practices by the operators, it is possible to reduce significantly on road accidents, deaths and injuries. The two companies have clearly shown that it is possible to bring order and sanity on our roads and still grow the business. The delegates made some proposals to raise the standards on road safety such as working towards reducing cases of "thuggery" and stealing in the vehicles, more recognition for good performance and study tours for the drivers to other countries.

## **Road Safety Standards**



The presenter, Mr. Odhiambo Odawa is a consultant on road safety standards in Kenya, with a wealth of experience in this field from his exposure in Kenya and Japan. Road transport is a service and a product- the product being the vehicle itself and the service

being what the vehicle gives. The major causes of accidents as earlier given by other presenters were shown to be over speeding, alcohol use and driving, state of roads, use of mobile phone while driving and pedestrians making wrong and dangerous crossings. Statistics of road accidents by province were given in order of ranking from the highest- Nyanza, North Eastern, Central, Western, Nairobi, Rift Valley, Eastern and Coast, male drivers coming at the top as major culprits. The KEBS specifications (Road Traffic Act of 2012) on the condition of motor vehicles and especially the PSV include among others, speed governor, anti-roll bars, efficient breaking system, safety belts and anchorage, efficient steering system, good tires/pressure and rims, rear/ front view mirror and rear lights reflectors. In a nut-shell, a roadworthy vehicle that can pass the test of "Road Transport Vehicle Safety first, Road Safety always". There are six categories of PSV vehicles each with their standard specifications (KEBS)- 14 sitting, 15-25 sitting, 26-40 sitting, over 40 sitting, urban over 40 sitting and double decker over 40 sitting. Other than the motor vehicles, there are many forms of transportation congesting the roads - motor cycles, bicycles, tuktuks, hand carts, pedestrians. This state of affairs coupled with gross disobedience to traffic rules and common decency contribute heavily to the increasing numbers of road accidents, deaths and injuries. Several interventions and recommendations to minimize these are: -

Pre-crash road accident care, consisting of vehicle inspections, valuations, testing, registration and insurance;

Post-crash care, consisting of ambulance services, fire brigade, insurance, volunteers etc

Road transport driving school curriculum;

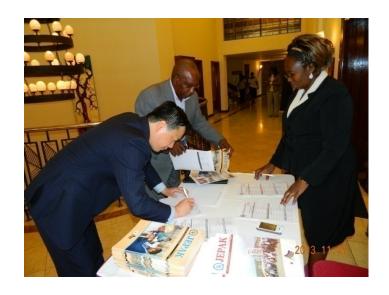
Passenger vehicle body builders adhering to the KEBS' designs and building specifications;

Crash data collection and analysis;

Modern road transport safety technology such as speed cameras, safety reflectors, breathalyzer etc.;

Infrastructure development providing pedestrian, motorcycles, tuktuks, hand carts with own lanes and space;

Road safety training at all levels of our education system.

















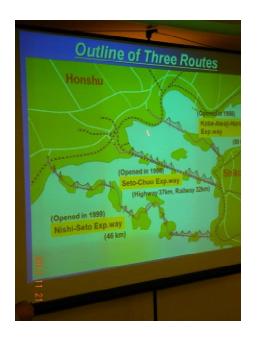
































### Weather Conditions and their Effects on Road



### **Accidents**

Very crucial insights on the effects of different weather conditions on road safety were given by Mr. Francis Ngwata, Central Province Director of Meteorology. Weather conditions in their various forms have a direct as well as indirect impact on road accidents. Weather is the state of the atmosphere that affects our activities, including driving. Much as this is beyond our control, we must, in the cause of these activities learn to adapt appropriately. In regard to driving, drivers respond differently to weather conditions, especially when these conditions are extreme. Either way, during extreme weather conditions, poor driving responses are experienced. High speeds as well as slow speeds during bad weather can have their share of road accidents. The most common effects of weather on driving likely to cause accidents are diminished visibility due to rain, fog, strong winds and strong sun. Each of these can cause a driver not to stay on lane and endanger the lives of many other road users.

When weather conditions are extreme the advice is:

Learn how to adapt to the prevailing conditions as best you can and look out for other road users;

If not absolutely necessary, postpone the journey until good conditions return;

If it is a must, listen out for traffic and weather cautions and obey the directions.

## **Recommendations and Way Forward**

The main objective of the conference was to synthesize all the presentations, opinions and views of the delegates and come up with some recommendations that would be presented to the competent authorities charged with administration/implementation and enforcement of road safety dockets. Having done that, JEPAK and the delegates would hope that action to address the road safety situation on our roads would begin to be taken sooner than later. The following recommendations are a product of well thought out papers, competently presented and subjected to interrogations and discussions by the delegates. The recommendations are by no means exhaustive, but are useful basis for more engagement. These are:-

Legislation and strict observance of PSV body building designs;

Provision of appropriate road signs on the roads;

Provision of proper and highly reflective road painting;

Provision of escape ways for big trucks especially in dangerous spots;

Strict observance of speed limits and heavy penalties in default;

Mandatory inspection of vehicles as follows- new, after 3 years, second hand, upon arrival and every year, thereafter;

Removing adverts where they pose danger to visibility and also causing distraction to driving concentration;

Public education on road safety and highway code using various ways and methods such as schools' curriculum, social media, village road safety committees among others;

Mandatory regular retesting of drivers especially those driving PSVs;

Proper bus stops designs;

Infrastructure that provides every road user with suitable service and space;

Encouraging public participation in road safety issues, case in point, the road hog initiative;

Improving the provided foot bridges making them safe for use at all times;

Making the use of roads easy and convenient for the physically challenged persons especially at the various bus stops;

Making road designs and construction satisfy international standards, case in point, the acceleration and deceleration lanes on our high ways.

Improve on preventive road maintenance to avoid costly late repairs;

Observing World Road Safety Day and organizing road safety road shows.

It was very obvious that we, individually and collectively contribute to the dangers and accidents on the roads in one way or another. The blame game has to stop and be replaced by a change of attitude that would see improvement on safety on the roads for all of us. We have to rise up to our expected roles. In all this, however, the state has a bigger responsibility in providing a conducive environment for a safety culture to take root and thrive.

The conference was officially closed by the JEPAK patron Professor Ratemo Michieka who expressed hope that the required change in road safety would start with all the participants present.

# **List of the Participants**

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Paul Wambugu	JKUAT	0722 961 195	
George Kebasu	P.D.	0721 774 198	
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Patrick Mutuku	HCC	0722 510 318	

Steve Umidha	BJA	0726 874 488	
Zachary Ochuodho	FP	0722 842 785	
Henry Kibira	The Star	0722 393 655	
Martin Masinde	RJ	0701 861 337	
Chacha Mwita	KEMRI	0713 430 733	
Eng. B. Kiema	NWCPC	0721 493 872	
Richard Mwangi	2NK Sacco	0722 673 573	
Boniface Mwangi	Media Cons.	0720 585 845	
Maina Kiambigi	P. Ltd.	0722 789 750	
Ayodi John	KNA	0707 081676	
Hilda Kamau	KNA	0735 496 259	
Peter Kanja	2NK Sacco	0721 237 292	
Georgina Obura	KNAD	0726 686 746	
Vincent Rutto	KEMRI	0721 584 265	
Amina Ibrahim	IQRA	0722 127 972	
Michael Mbugua	T.FM.	0715 760 714	
Denson Machuki	Waumini FM	0720 680 541	
Joseph Kimani	AG Cons.	0714 372 041	
Charles Kiranga	N. Constr.	0722 717 014	
Harun Mwaura	Beacons Cons.	0724 833 603	