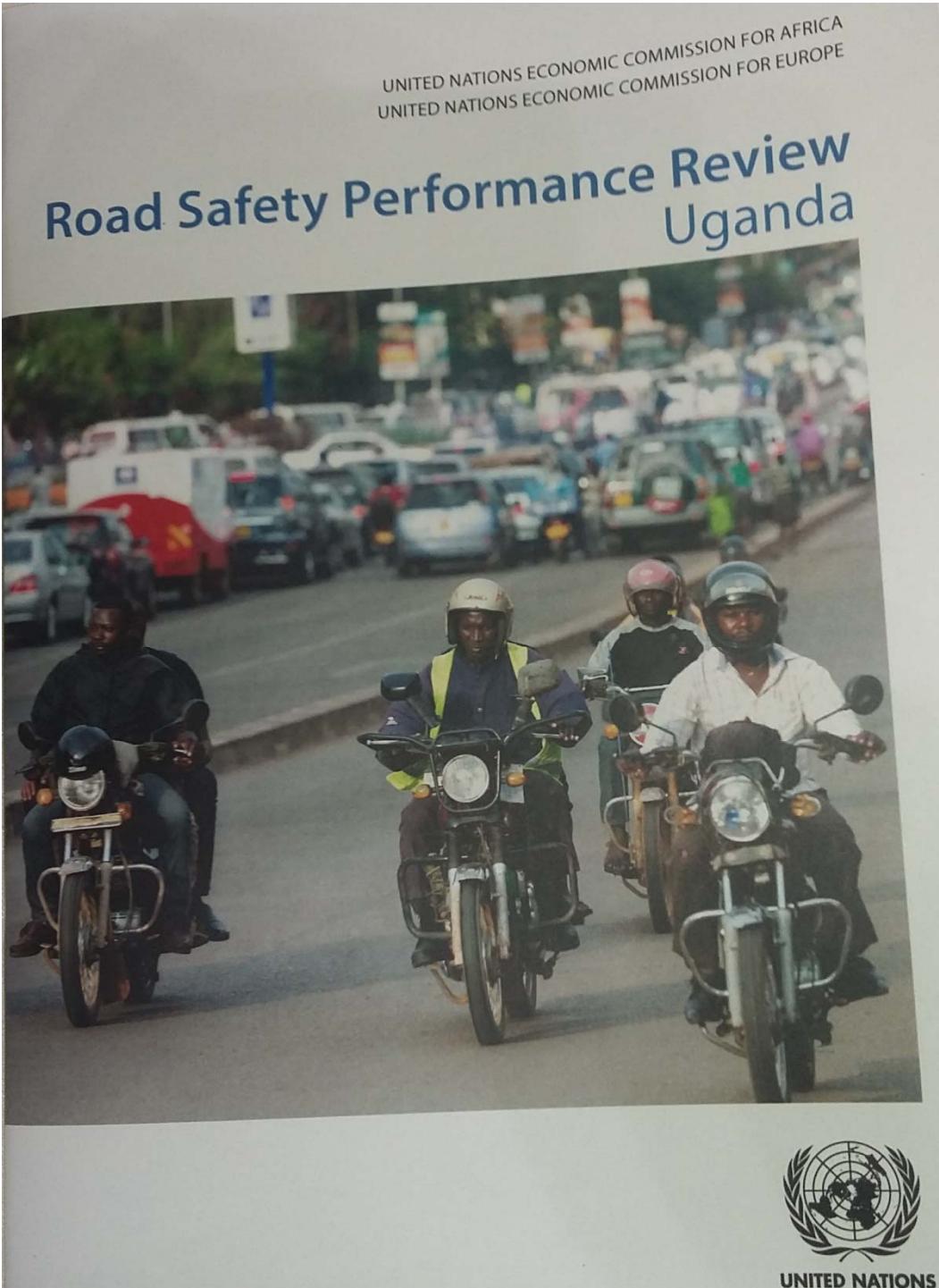




# Uganda Road Safety Capacity Building Workshop

## Motorcycle Training Curriculum & Manual Overview

*Mr. Paul Kwamusi, Consultant*



Driver  
Training is  
Poor  
Leading to  
High levels of  
crashes  
*(Accidents)*



# **Who is to blame?**

- A. Driver Instructors**
- B. Learners**
- C. Enforcers**
- D. Regulators**
- E. Private sector**
- F. Civil Society**
- G. Politicians**
- H. Road users**

# What is correct answer

- A. Driver Training is letting down Road safety
- B. Road safety is letting down Driver Training

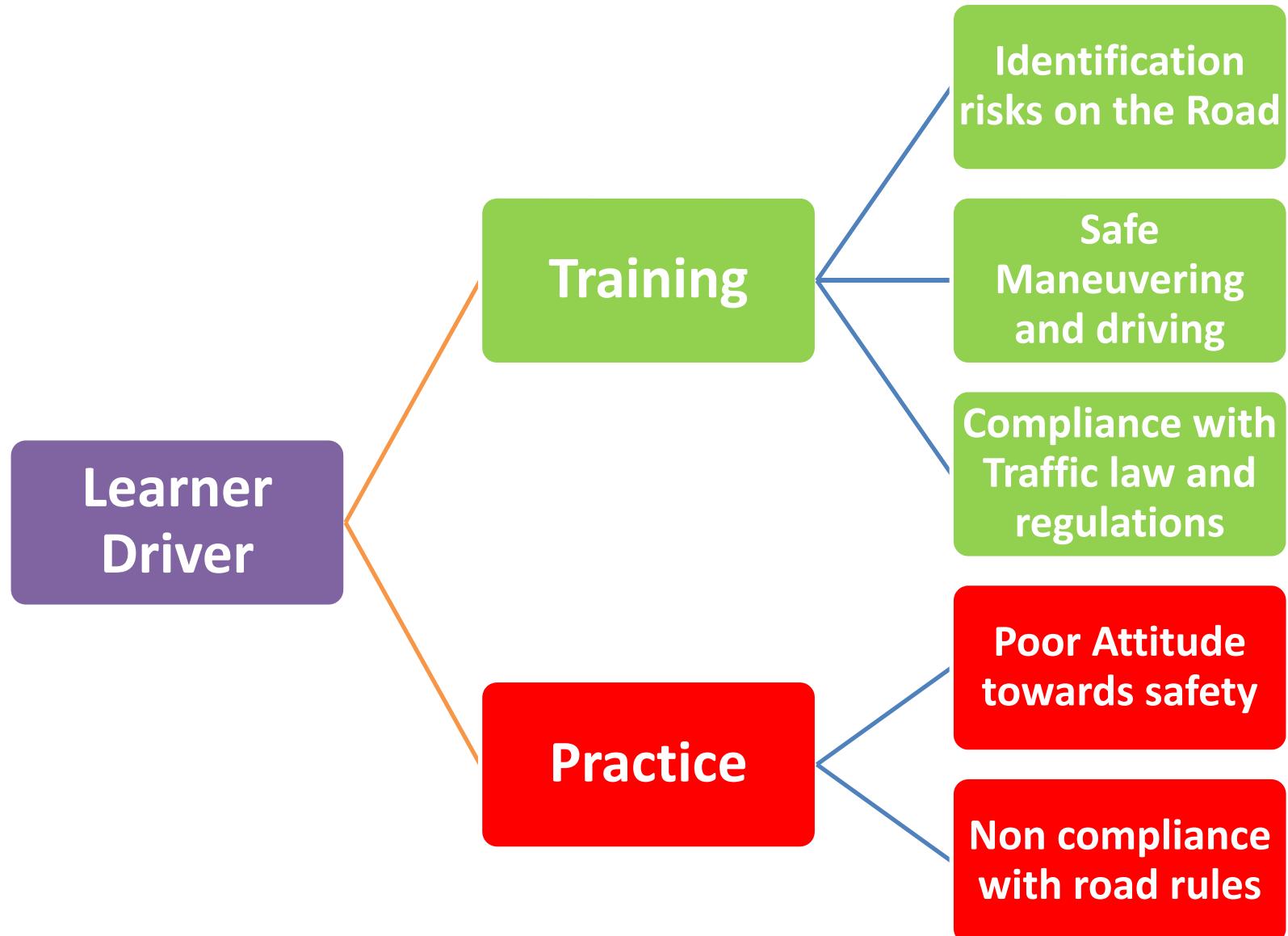
# Conditions that enable effective driver training

Issue	Review findings
1. Instructor training	X
2. Driver Instructor certification	X
3. Motorcycle training	X
4. Learner driver (Group B) training	√
5. PSV driver training	X
6. HGV training	X
7. Driver testing (All)	√
8. Use of Curriculum	X
9. Use of Manuals	X
10. Enforcement of Driving standards	X

# Further findings

1. Learners in many driving schools arrive in driving schools in no condition to learn
2. Many come to driving schools deprived and want to learn driving for a job to escape poverty.
3. There were also concerns about the quality of teaching, with too many instructors not being particularly well trained themselves
4. There was also a problem of instructor absenteeism which has been linked to instructors reducing costs of instruction or not being regularly paid

# Role of Training



# In Uganda, there is no formalized Motorcycle training system

- Driving schools register low demand for motorcycle training services
- **Most riders are self or peer trained**
- Many are injured or die in the process of learning
- Many others die or are injured in trying to overestimate their performance
- Self trained riders usually do not appreciate the learning process

# Training focuses a learner on driver deficiencies that is likely to lead to severe and fatal injuries

## A well trained learner

- Knowledge
- Driving skills
- Appliance of rules
- Perception and awareness
- Communication with other road users in traffic
- Adaptation to current situations
- Realistic view of own capacity and others'

## A poorly trained learner

- Limited Knowledge
- Poor Driving skills
- Non compliant to rules
- Poor perception and awareness
- Poor Communication with other road users in traffic
- Poor adaptation to current situations
- Poor view of own capacity and others'

Our riders are skip safety training except  
for practical handling of the motorcycle

The results have been  
devastating for the  
riders, passengers and  
other road users

TRUTH EVERY DAY

TUESDAY, FEBRUARY 13, 2018 NO. 044 USHS 2,000 | KSH107 | RF950 | TZSH1,500

# Daily Monit

## Bodas kill 7,000 people in 3 years

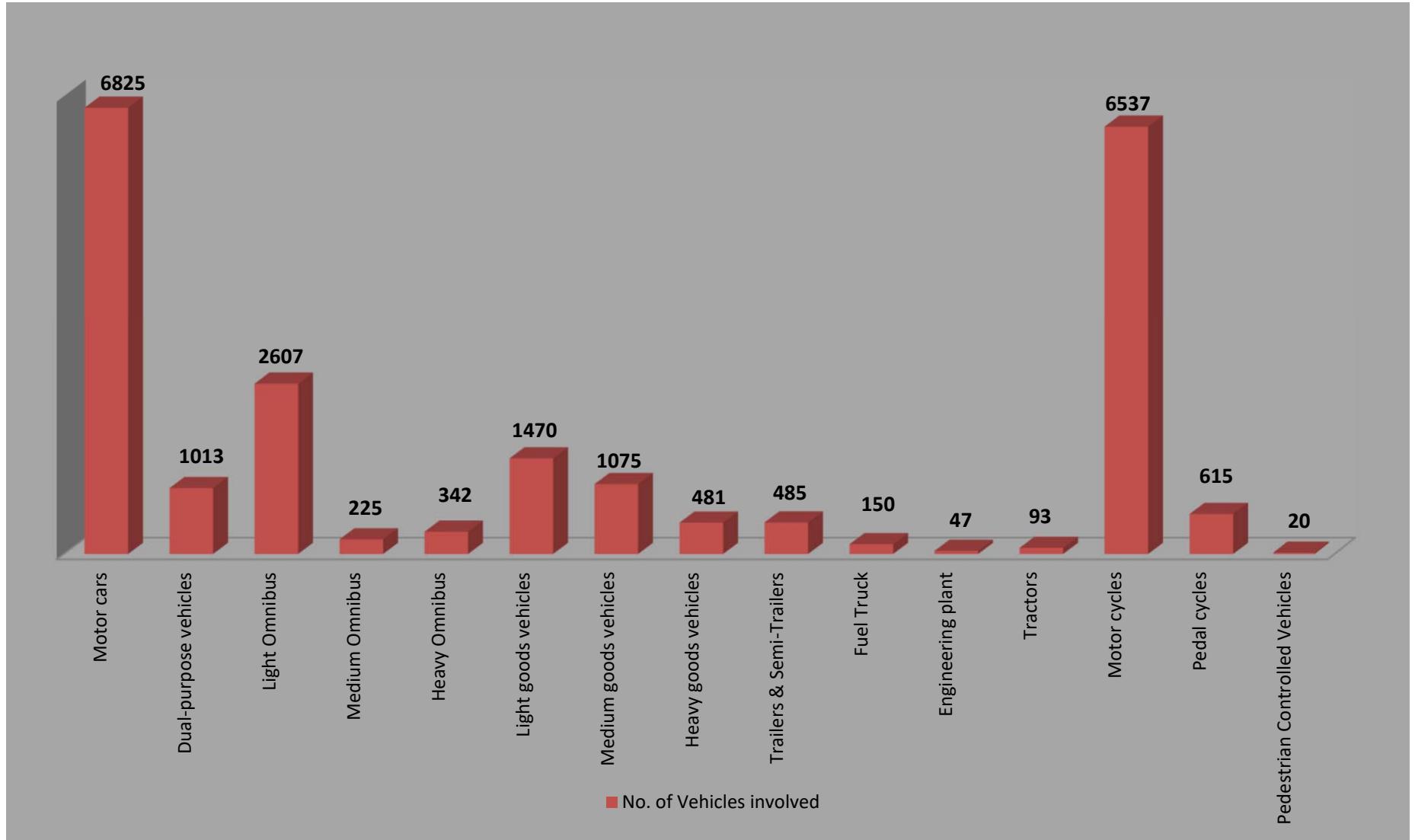
**Causes.** Police attribute accidents to untrained riders, impatience of the motorcyclists, reckless riding and shortage of traffic police officers in some parts of the country to enforce traffic regulations. >>

P.5



The results are devastating

# Motorcycle risk to crashes (2016)



# Testing the resilience of motorcycle use



ANIMAL  
RIGHTS

## Risky mode of transport

A boda boda rider transports a cow on the Luweero-Gulu highway last Saturday. It is not clear where he was taking the cow or why he chose that mode of transport which is risky as well as cruel to the animal. PHOTO: STEPHEN WANDERA.



# Testing the resilience of motorcycle use



**Testing the resilience of motorcycle use**

# **Child safety is compromised**



# Testing the resilience of motorcycle use



# Testing the resilience of motorcycle use





Killer M/Cycles



Killer M/Cycles

# Curriculum/Manual Development

## Curriculum Development 2004

- Learner Driver Curriculum
- Driving Instructors Curriculum

## Curriculum Development 2014

- **Motorcycle Curriculum**
- PSV Curriculum
- M/HGV Curriculum

## Curriculum Development 2016

- EAC HGV Curriculum

## Manual Development 2008

- Learner Driver Manual
- Driver Test Manual
- Driver Test Question Bank

## Manual Development 2014

- **Motorcycle Manual**
- PSV Manual
- M/HGV Manual

## Manual Development 2016

- EAC HGV Manual



MINISTRY OF WORKS AND TRANSPORT

## Curriculum for Training Motorcyclists



MINISTRY OF WORKS AND TRANSPORT

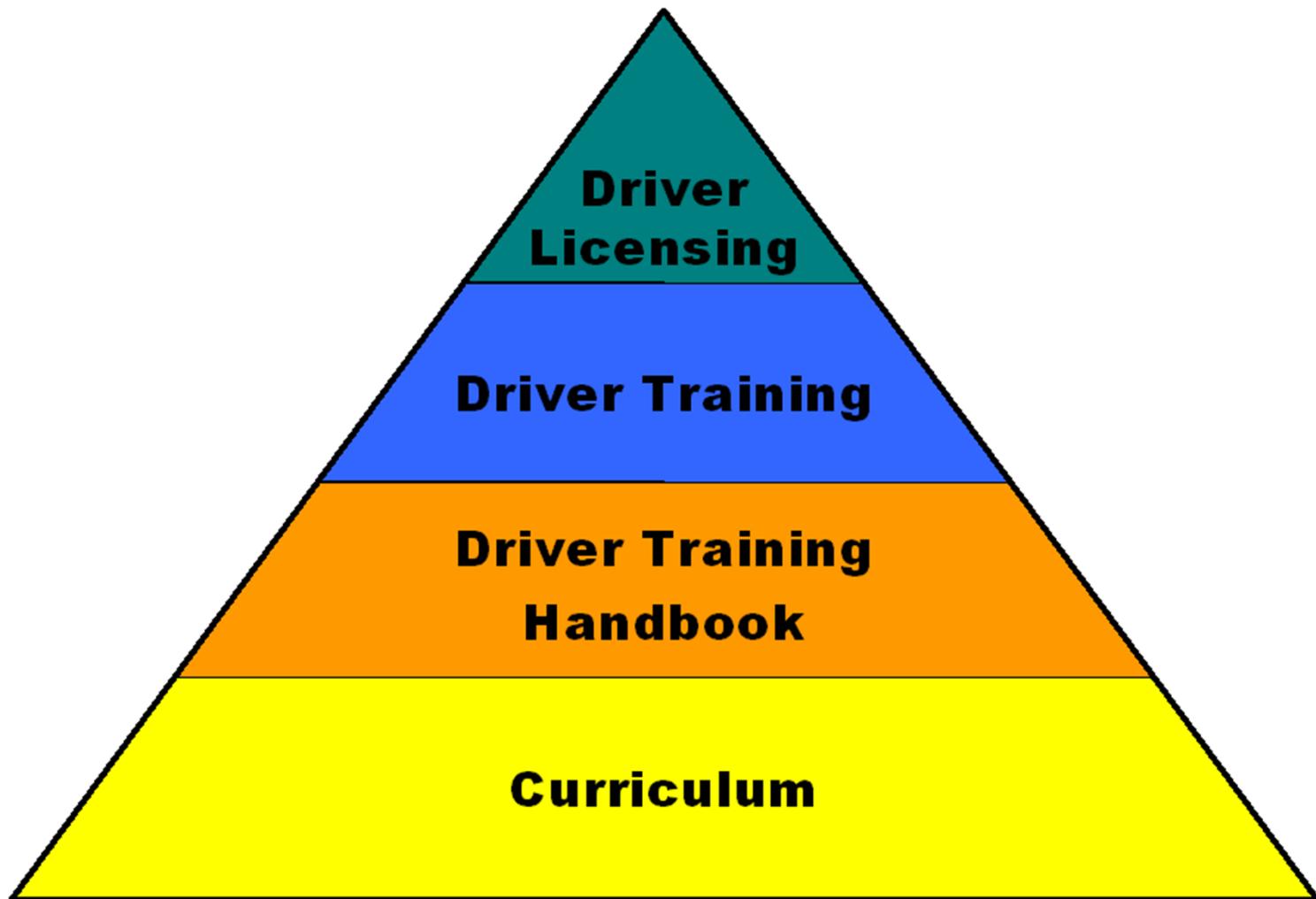
## MOTORCYCLE RIDERS' MANUAL



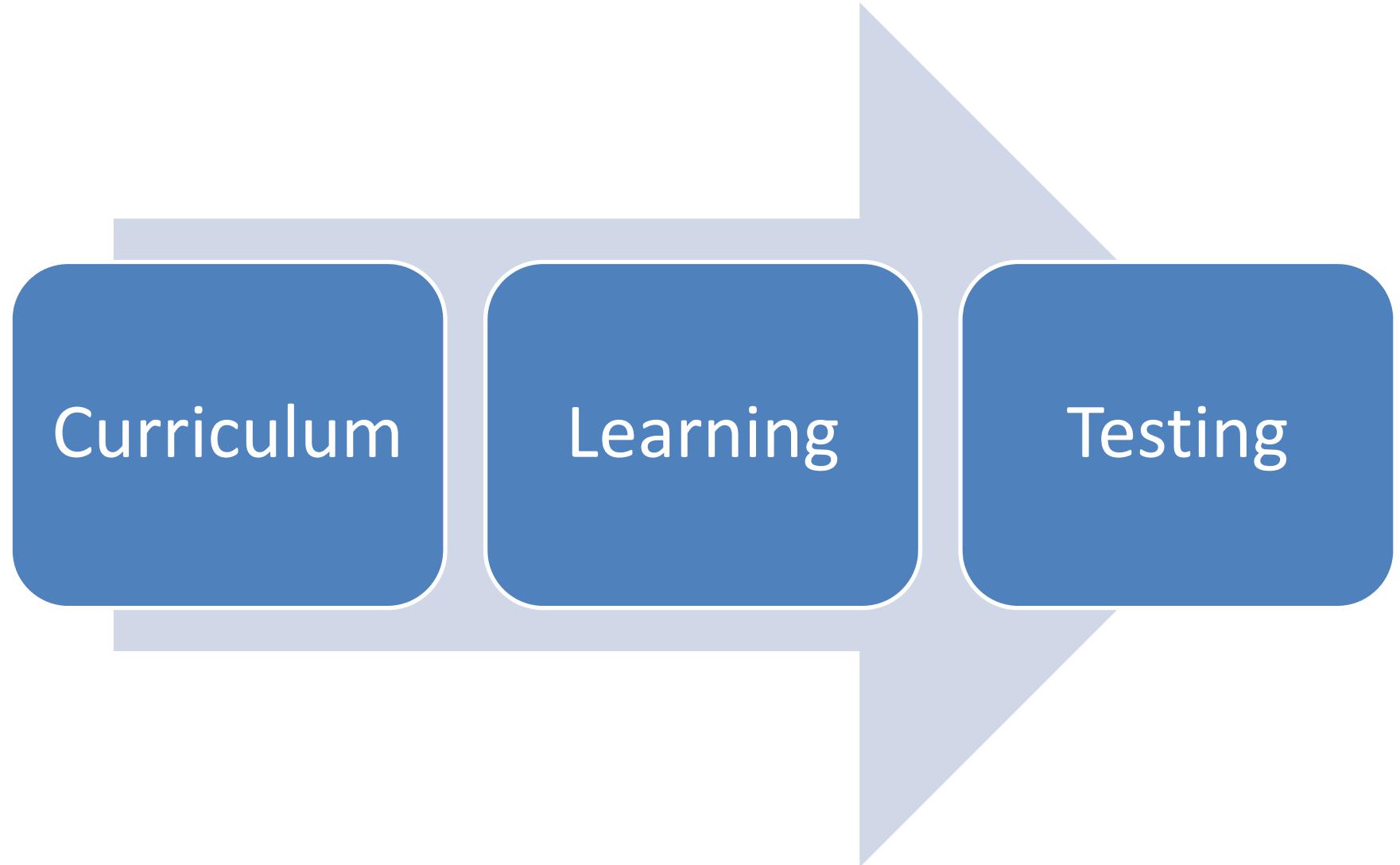


Motorcycle curriculum does not cater for  
Tricycles as they have recently been introduced

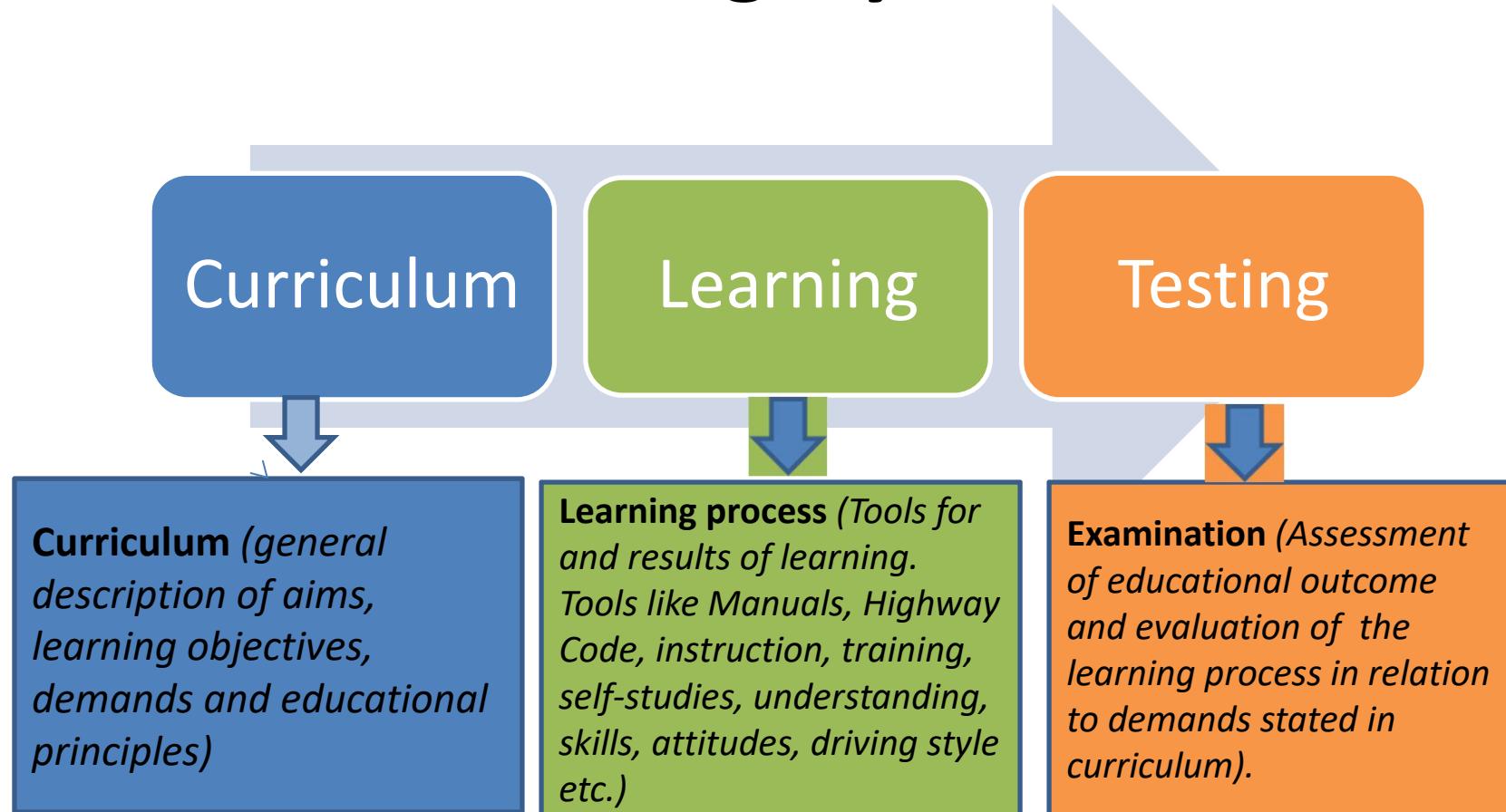
# Driver Learning Triangle.



# Driver training involves 3 elements:



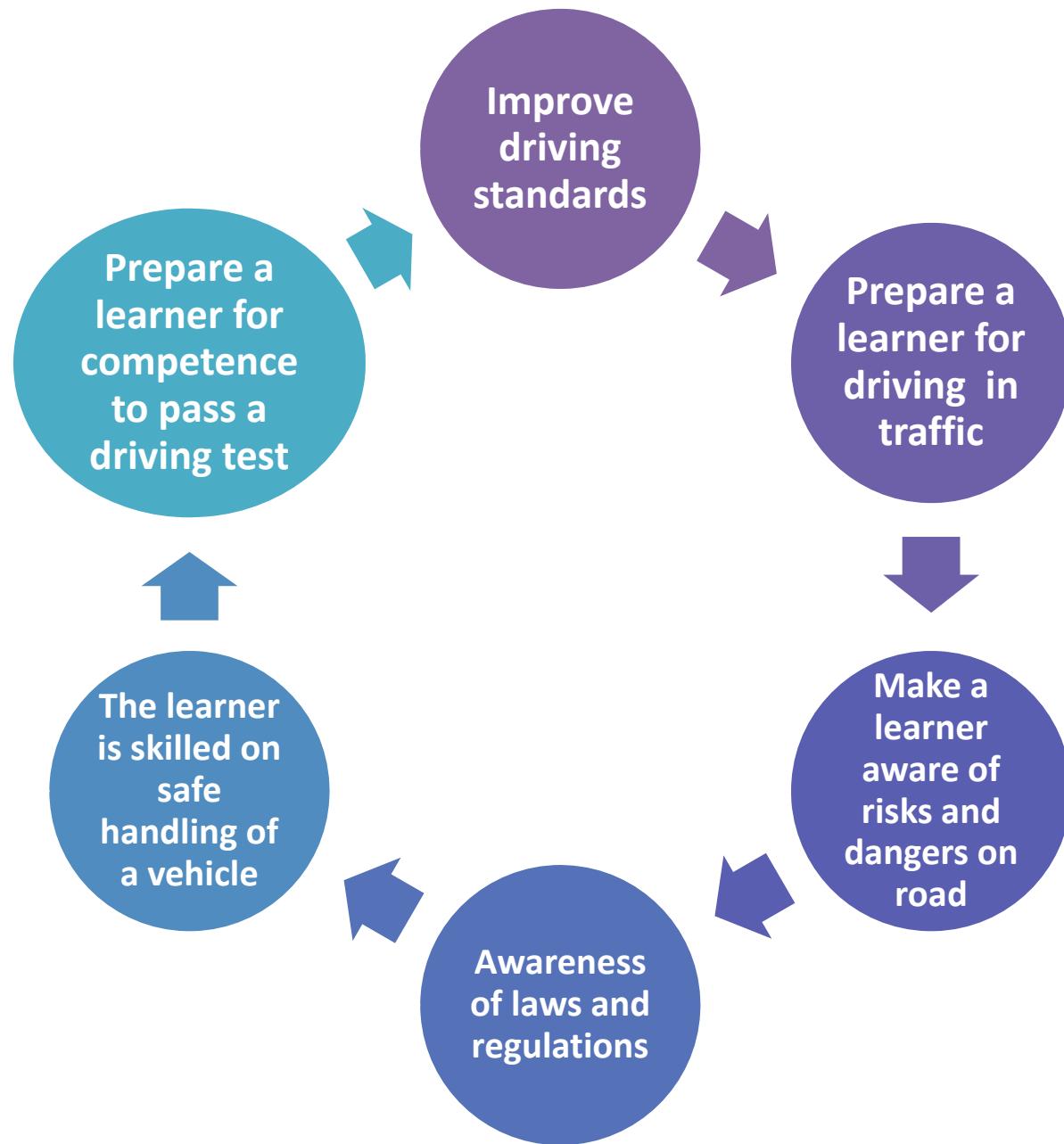
# Three major Aspects of any Driver Training System



# The objectives for motorcycle curriculum

- To improve motorcycle riding standards in Uganda
- To adequately prepare the Motorcyclists to be able to ride safely
- To teach how to practically operate a motorcycle
- To provide Motorcyclists with riding knowledge
- To improve competence to Motorcyclists
- To contribute to sustainable training for Motorcyclists in the country
- To provide training methods and framework for Motorcycle manual development

# Role of a driving curriculum



### Theory

- Understand why to do the exercise

### Demonstration

- Instructor demonstrate

### Instructional training

- learner do the task under instruction

### Independent Training

- learner train independently

# The motorcycle curriculum

- **Module 1 Introduction**
- **Module 2 Introduction to the Motorcycle**
- **Module 3 Traffic requirements for a motorcyclist**
- **Module 4 Traffic signs and signal regulations**
- **Module 5 Learning to ride**
- **Module 6 On Road Riding Skills**
- **Module 7 Hazard Perception and awareness**
- **Module 8 Defensive driving**
- **Module 9 Customer care**
- **Module 10 Accidents and Emergencies**
- **Module 11 HIV/AIDS Prevention and care**

# The Motorcycle Training methods

Training Module	Training method
1 Introduction	Theory
2 Introduction to the Motorcycle	Theory/ Practical
3 Traffic requirements for a motorcyclist	Theory
4 Traffic signs and signal regulations	Theory
5 Learning to ride	Practical
6 On Road Riding Skills	Theory/Practical
7 Hazard Perception and awareness	Theory
8 Defensive driving	Theory/Practical
9 Customer care	Theory
10 Accidents and Emergencies	Theory/Practical
11 HIV/AIDS Prevention and care	Theory

## Module 2 Introduction to Motorcycle

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.1	Ability to understand the use of motorcycle	1	Introduce the reader to motorcycles	1.1	Introduction
				1.2	Explain the different types of Motorcycles
		2	Identify the risks and dangers of motorcycles and how to maintain it.	2.1	Explain the different kinds of risks and dangers of Motorcycles
			2.2	Demonstrate the Motorcycle safety checks and maintenance	
1.2	Understanding the components of a motorcycle	3	Identify the meaning and use of components of a motorcycle	3.1	Explain the different common parts of a motorcycle
				3.2	Explain the different types of motorcycle controls
1.3	Understand the speed regulation rules	4	Identify the risks involved for not complying the speeding rules	4.1	Explain the benefits of speed regulations
1.4	Understand the working operations of a motorcycle	5	Identify the safe operation of the motorcycle	5.1	Demonstrate the meaning of different motorcycle dashboard lights

## Module 3 Traffic regulations for motorcyclists

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.1	To understand and comply with the traffic regulations for motorcyclists	1	Introduce the role of traffic regulations to the learner	1.1	Introduce the benefit of traffic rules to the learner and the other road users
		2	Explain the purpose of the Traffic and Road Safety Act	1.2	Explain the role The Traffic and Road Safety Act, 1998 and the need to comply with the law
		3	Identify the specific laws and rules related to motorcycle use	1.3	Explain the Specific regulatory requirements for motorcyclists including the motorcycle regulations of 2004
		4	Identify the risks related to non-compliance of the Traffic regulations		Explain the risks of road crashes and injuries that can arise due to non-compliance of the law

## Module 4 Traffic signs and signal regulations

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.1	To understand and comply with the traffic signs and signals	1	Understand the role of traffic signs and their meanings	1.1	Introduce road signs and signals to the learner outlining the benefits of complying
		2	Identify the risk of not complying with road signs and markings to the reader	1.2	Explain the purpose of traffic signs and road markings
		3	Identify the risk of not complying with the traffic lights signal	1.3	Traffic signs and road markings
		4	Identify the purpose of road markings and the need to comply	1.4	Explain the Traffic lights meanings
				1.5	Explain the meanings of different Road markings

## Module 5 Learning to Ride

Learning Outcomes		Competencies		Related Tasks	
<b>Learn how to ride safely a motorcycle</b>	Be familiar with the motorcycle	1	Introduce the reader on how to ride safely	1.1	Introduce the concept of riding
				1.2	Explain the Basic Principle of Riding
	Start and stop the motorcycle safely	2	Use a safe, systematic routine to support moving off safely and smoothly	2.1	Demonstrate how to Start and stop the motorcycle safely
				2.2	Demonstrate riding the motorcycle and braking to stop
				2.3	Demonstrate how to undertake an Emergency stop
				2.4	Demonstrate safe Brake Use
	Moving off safely	3	Maneuvering under various circumstances safely	3.1	Demonstrate riding in a straight line and stopping
				3.2	Demonstrate Riding slowly Riding slowly
					Demonstrate riding a figure of Eight
				3.3	Demonstrate Rear

Learning Outcomes		Competencies		Related Tasks
Turning left and Right	4	Identify the risks involved in turning	4.1	Demonstrate turning left and right safely
Gear change safely	5	Identify different types of gears	5.1	Demonstrate the gear changing methods
Making a U turn	6	Identify the risks involved U turning	6.1	Demonstrate the U-turn
Use of hand signals	7	Identify the use and risks in use of hand signals	7.1	Demonstrate the use of hand signals
Moving off safely at an angle	8	Identify the risks of moving off at an angle, uphill an down hill	8.1	Moving off at an angle
			8.2	Demonstrate how to avoid Wobbling
			8.3	Riding uphill and down hill

## Module 6 On Road Riding Skills

	Learning Outcomes		Competencies		Related Tasks
1.1	Being familiar with on road siding skills	1	Explain the risks and dangers of riding in traffic	1.1	Introduce the risks involved riding in traffic
				1.2	Explain the characteristics of Motorcycle riding in Traffic
				1.3	Demonstrate the use of Mirrors
				1.4	Demonstrate the riding skills
1.2	Use of appropriate speeds	2	Explain the risks of over speeding and use of appropriate speeds	2.1	Explain the need of use of appropriate Speed to avoid crashes and other risks.
1.3	Anticipation of hazards	3	Explain the anticipation of hazards	3.1	Explain what the Anticipation means and the risks of poor anticipation

# Module 6 On Road Riding Skills

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.4	Apply the road Positioning technique	4	Explain the role of appropriate following positioning	4.1	Identify the risks of poor road positioning
1.5	Safe following conditions	5	Identify the need for a safe following distance	5.1	Demonstrate a safe following distance
1.6	Weather and riding conditions	6	Identify the effect and risks of adverse weather towards riding	6.1	Demonstrate different weather conditions and their effect and risks on riding.
1.7	Parking the motorcycle safely	7	Identify the risks and dangers of poor parking	7.1	Demonstrate the safe Parking areas

## Module 7 Hazard perception and Awareness

Learning Outcomes		Competencies		Related Tasks	
<b>1.1</b>	<b>Meaning of Hazard perception and awareness</b>	<b>1</b>	<b>Explain the ability to ensure that hazards are well understood before they create incidents</b>	<b>1.1</b>	<b>Introduction</b>
				<b>1.2</b>	<b>Demonstrate the Awareness and anticipation of risks on the road</b>
<b>1.2</b>	<b>The effect of different road surface conditions</b>	<b>2</b>	<b>Explain how different road conditions lead to different riding experiences</b>	<b>1.3</b>	<b>Demonstrate the different road surface conditions and the risks related to them</b>
<b>1.3</b>	<b>Riding in busy areas</b>	<b>3</b>	<b>Identify the different risks involved in riding in a busy area</b>	<b>1.4</b>	<b>Explain the different risks related to riding in a busy area like poor visibility and observation</b>

# Module 7 Hazard perception and Awareness

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.4	Hazard awareness at different situations on the road	4	Identify the different risks particularly at junctions, intersections, curves and traffic lights areas	4.1	Explain the Hazard at different situation on the road
1.5	Hazards along rural roads	5	Identify the different risks particularly related to rural roads like loose animals and loose surface	5.1	Explain the hazards along rural roads to avoid the risks of road crashes
1.6	Application of Prevention Maintenance	6	Identify the risks of poor maintenance and need to ensure that the rider sticks to proper preventive maintenance culture	6.1	Demonstrate the need for Prevention Maintenance
1.7	Application of Basic safety	7	Promote the need for	7.	Explain the meaning

# Module 8 Defensive Riding

	Learning Outcomes		Competencies		Related Tasks
1.1	Introduction	1	Understand the role of the poor attitude and crash causation	1.1	Introduce Defensive driving as a concept that would lead to safer road user behaviour
1.2	Meaning of defensive riding	2	Definition and meaning of driving defensively	1.2	Meaning of defensive riding
1.3	Elements of defensive riding	3	The learner to be able to understand the elements of defensive riding	1.3	Explain the Elements of defensive riding: Knowledge, Alertness, Judgment, Foresight, Skill

# Module 8 Defensive Riding

	Learning outcomes		Competences		Related Tasks
1.4	<b>Observation</b>	4	<b>Explain the risks of poor observation and involvement in crashes</b>	1.4	<b>Demonstrate the observation skills</b>
1.5	<b>Keys to safe riding</b>	5	<b>Understand the keys to safe riding</b>	1.5	<b>Explain and demonstrate Observation Identification, Decision Making and Action</b>

## Module 9 Accidents and Emergencies

	Learning Outcomes		Competencies		Related tasks
1.1	Introduction	1	To understand what to do when a crash happens	1.1	Introduce and identify the rider to many types of emergencies that can occur on the road
1.2	At the road traffic accident Scene	2	To identify the need to be a first respondent in case of the crash	1.2	Explain what a rider needs to do or assist in case of a crash Scene
1.3	First Aid on the Road	3	To understand the need to have First Aid	1.3	Explain the need for First Aid First Aid on the Road
1.4	Other Unsafe Situations	4	To discourage the unsafe actions on the road like stealing from crash victims	1.4	Explain the unsafe actions and situations

# Module 10 Customer Care

	Learning Outcomes		Competencies		Learning Outcomes
1.1	Introduce the concept of customer care	1	The learner understands what customer care means	1.1	Introduce the word customer care
1.2	Meaning of Customer Care	2	The learner understands why a passenger should be treated with care	2.1	Explain what entails of Customer Care
		3	The learner understands the aim and objectives customer care Objective	3.1	Explain the meaning of Customer care
		4	The operator understands why Passengers need to be treated with care	4.1	Explain why Passengers need to be treated with care

# Module 10 Customer Care

	<b>Learning outcomes</b>		<b>Competences</b>		<b>Related Tasks</b>
1.3	Promote the professional Services	5	The learner understands why Professional services are required by the leaner	5.1	Identify the behaviours that compromise the Professional Services
		6	Identify the Commercial Pressure and the risk of crashes	6.1	Explain the issue of commercial pressure
1.4	Transportation of the Elderly and those with Disabilities	7	The learner understands why transportation of the Elderly and those with Disabilities need to be handled with care	7.1	Explain why the need to transportation of the Elderly and those with Disabilities
1.5	Poor Public Behavior to avoid	8	The learner understands and identifies the behaviours that compromise the effective	8.1	Explain the poor public Behavior to avoid particularly sexual harassment

## Module 11 HIV/AIDS prevention and care

	Learning Outcomes	Competencies		Related Tasks
1.1	HIV/AIDS challenge and mobile people	1 Identify the challenge of the scourge amongst mobile people	1.1 1.2 1.3	Introduce the concept of safe Explain the dangers of the HIV/AIDS challenge and mobile people Explain the meaning of HIV antibody positive
1.2	HIV/AIDS prevention methods	2 The learner understands the preventive methods available  3 The learner understands why the VCT is important	2.1 3.1	Explain the HIV/AIDS prevention methods  Explain what Voluntary Testing and Counseling (VCT) means

# Module 11 HIV/AIDS prevention and care

	<b>Learning Outcomes</b>		<b>Competencies</b>		<b>Related Tasks</b>
1.3	Care for people living with HIV and AIDS  Strategies for fighting Stigma and Discrimination	4	The learner understands how to care for people living with HIV/AIDS	4.1	Care for people living with HIV and AIDS
		5	The learner avoids Stigma and Discrimination	5.1	Stigma and Discrimination
				5.2	Strategies for fighting Stigma and Discrimination



MINISTRY OF WORKS AND TRANSPORT

# MOTORCYCLE RIDERS' MANUAL



# Objectives of the Manual

- To impart basic knowledge and skills to persons who wish to ride motorcycles
- To introduce to motorcyclists basic the technical knowledge of how a motorcycle operates
- To train motorcyclists on the legal requirements of using the road
- To improve the attitude of motorcyclists
- To safeguard the lives of passengers on motorcycles

# Training methods of the Manual

- First, the theory of driving; this includes the concepts of basic handling of the a motorcycle
- Secondly, driving in a training area usually off road
- Thirdly, practical riding exercises in traffic
- Fourthly, training through end of chapter exercises

# Chapter 2 Introduction to a Motorcycle

- Types of Motorcycles
- Risks and dangers of Motorcycles
- Motorcycle safety checks and maintenance
- Fitness to ride

# Chapter 3 Understanding the Motorcycle

- Common parts (components) of a motorcycle
- Motorcycle Controls
- The Motorcycle Dashboard (Instrument Panel)
- The Motorcycle Engine
- The motorcycle systems

# Chapter 4 Legal requirement for riding a motorcycle

- The Traffic and Road Safety Act, 1998
- The Highway Code
- Traffic rules
- Traffic regulations
- Specific regulatory requirements for  
motorcyclists

# Chapter 5 Traffic signs and Signal

- The purpose of traffic signs and road markings
- Traffic signs
- Road markings

# **Chapter 6 Learning to ride**

## **Basic Principle of Riding**

- How to hold and push the motorcycle
- How to sit on a motorcycle
- Adjusting the Controls
- Electric starter
- Kick starter
- Stopping the engine

# Basic riding skills

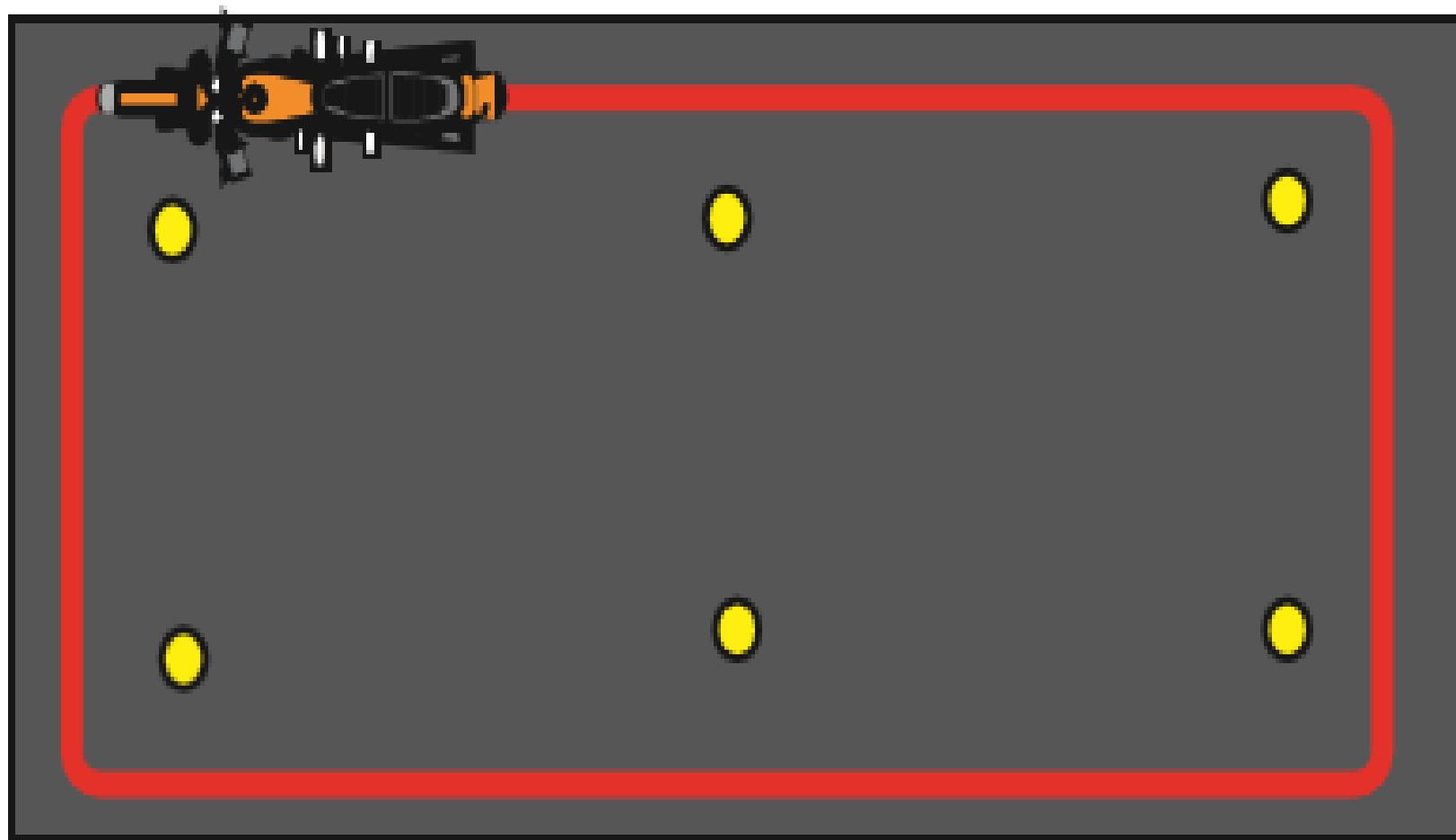
## **Riding the motorcycle and braking to stop**

- Clutch control
- Fully automatic motorcycles
- Semi-automatic motorcycles
- Stopping safely
- Disengaging the clutch
- Riding at low speed and steering

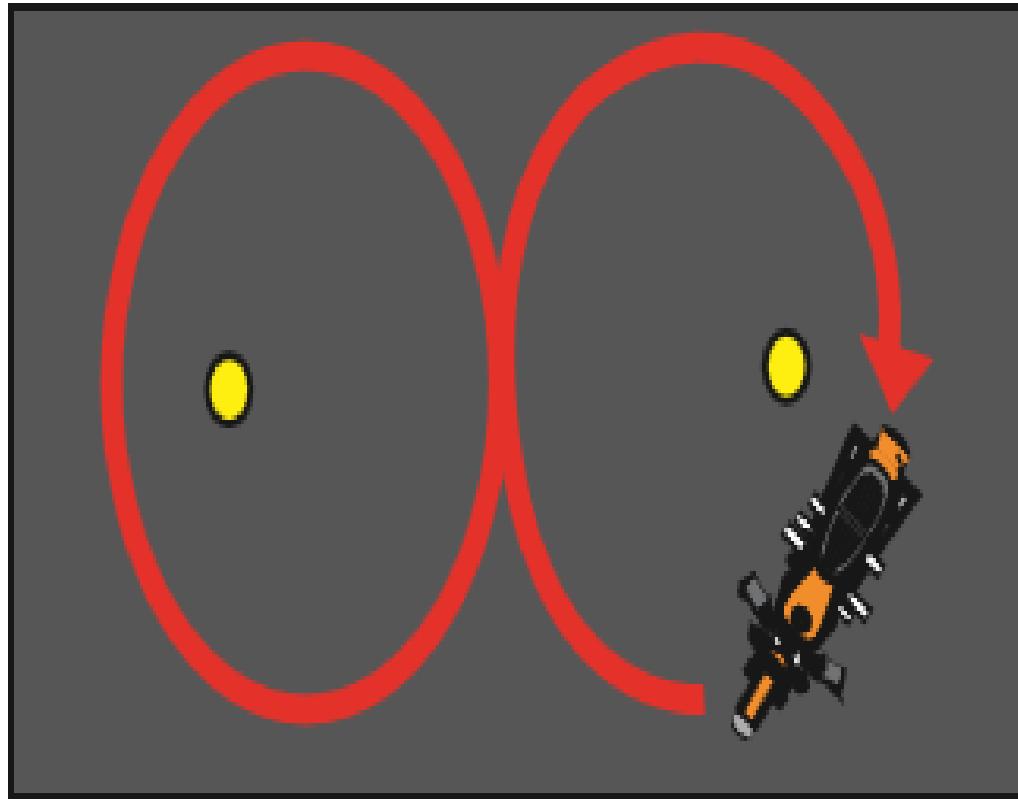
# Basic riding skills

- **Brake Use**
  - How to stop most effectively
  - Using one brake only
  - When to brake
  - Where to brake

# Starting and Stopping



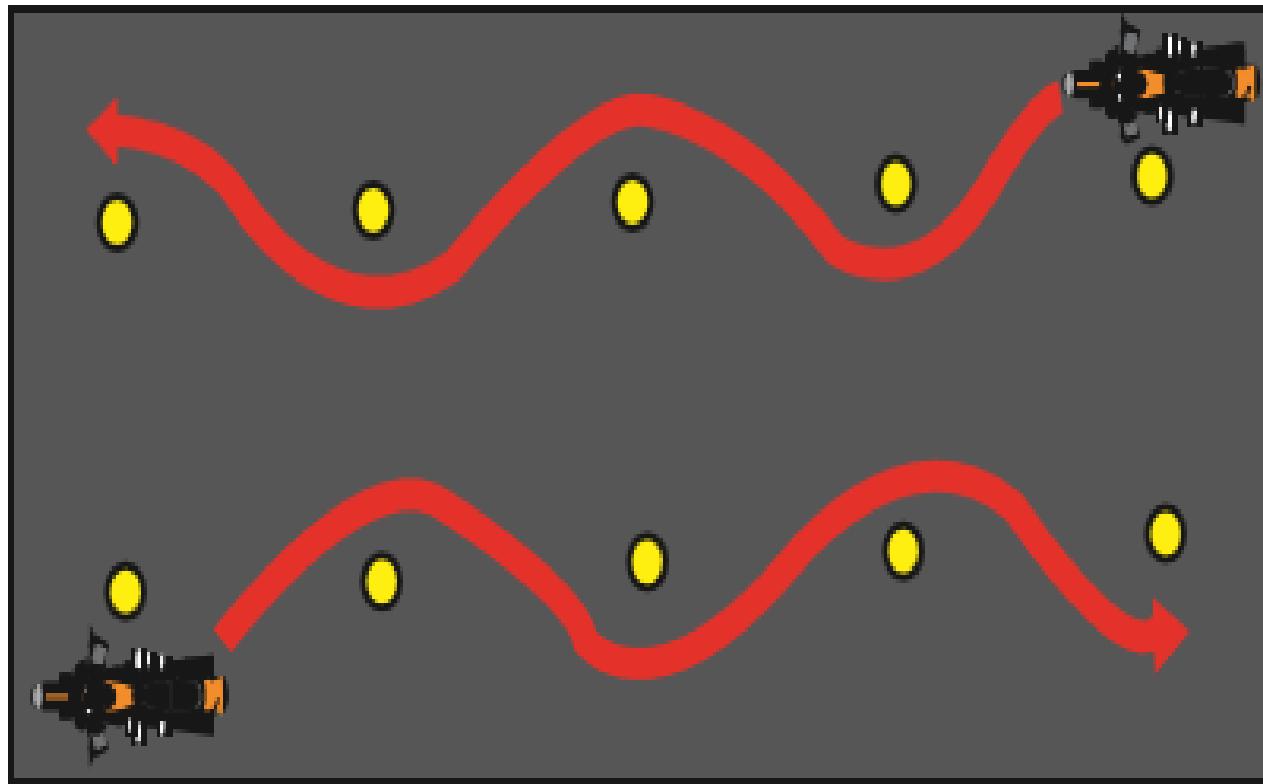
# Riding in figure 8



# Rear Observation



# Turning left and right



# Gear Changing

- **Changing gear**
  - Changing up
  - Changing down
  - Finding the right gear

# Making a U Turn



# Use of Hand signals



# Other training area Maneuvers

- Moving off at an angle
- Riding uphill and down hill

# **Basic Riding Elements**

- **Observe**
- **Signal**
- **Mirror**

and

- **Position**
- **Speed**
- **Look**

**OSM-PSL**

# Chapter 7 Riding in Traffic

Characteristics of Motorcycle riding in Traffic

## Two wheeler Vulnerability

- Overloading
- Dangerous loading
- Passenger action
- Speeding

# Vulnerability



# Vulnerable motorcyclists



# Poor weather affects riding





# Need for Helmet

A helmet is useful in the following ways:

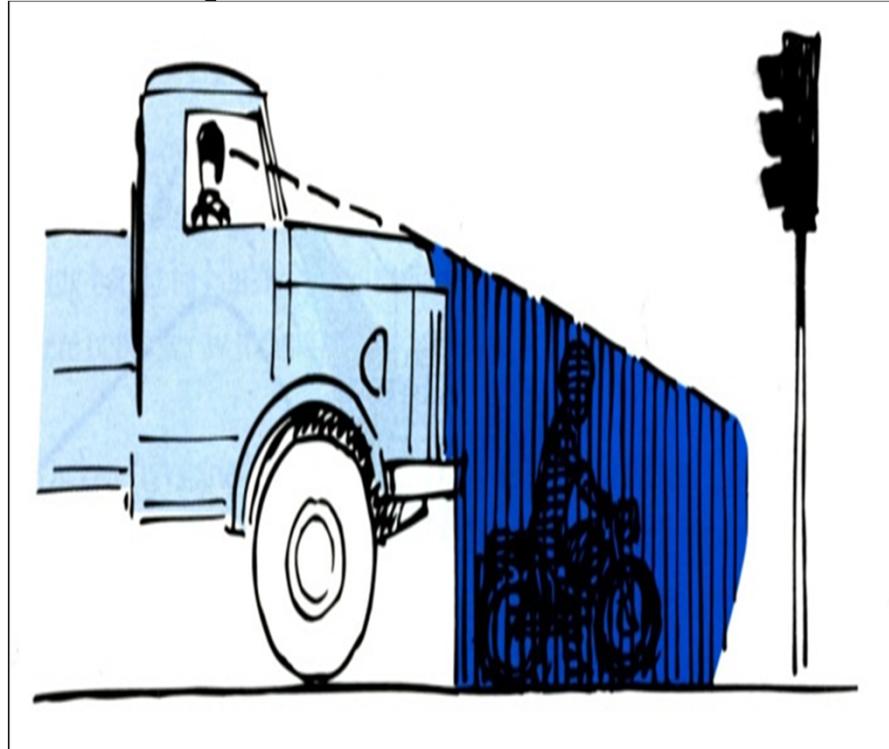
- Spreads the forces of impact over a greater surface
- Prevents direct contact between the skull and impacting object acting as a barrier between the head.
- Helps in reducing severity from criminals

Dangers of non-use of helmet by riders

- Severity of crashes
- Brain damage in case of crashes
- Dust enters your body
- Risk of eye diseases
- Poor visibility in adverse weather



# Visibility



# Need for visibility aids

- Vulnerability of new and young riders
- Visibility Aids



# Need to increase visibility



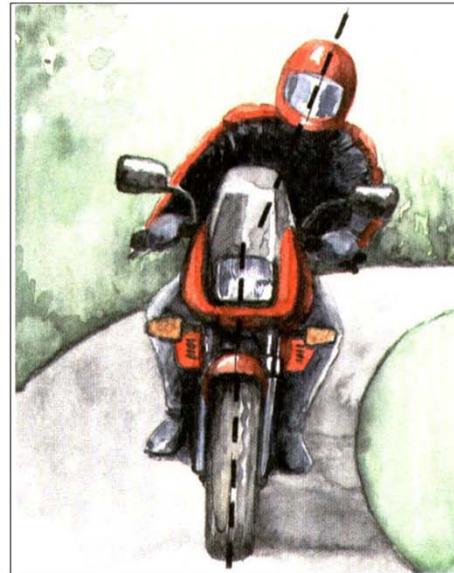
# Use of Mirrors



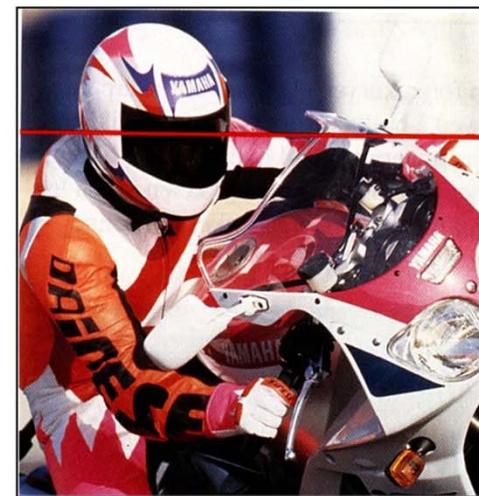
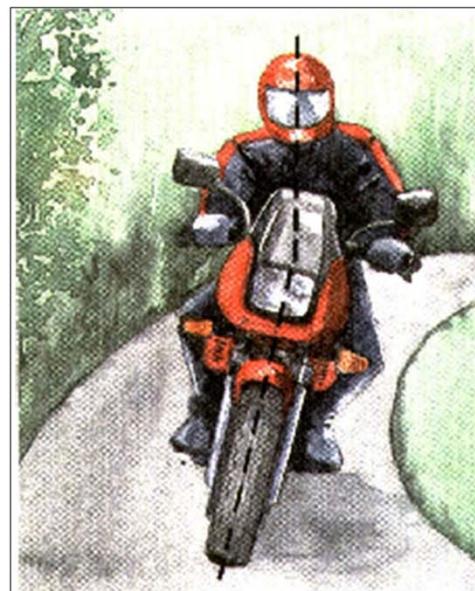
# Riding skills in traffic left and right bends



**Lean with**



**Lean out**



*Rider leaning out, but with the head straight a*

# Other riding skills in traffic

- Appropriate Speed
- Anticipation
- Road positioning
- Following distance
- Weather conditions
- Parking

# Chapter 8 Hazard Perception and Awareness

- The need for hazard perception and awareness
- Different hazards on the road
- Riding in busy areas
- Hazard awareness at junctions
- Hazard awareness at pedestrian crossings
- Hazard awareness at traffic lights
- Hazard awareness at roundabouts

# Hazard Perception and Awareness..2

- Hazard awareness at slopes or gradients
- Hazard awareness at corners and bends
- Hazard awareness at road obstructions
- Hazard awareness during overtaking
- Hazard awareness at Railway (level) crossings
- Hazard awareness during the night conditions
- Hazard awareness of Cyclists
- Hazards along rural roads

# Chapter 9 Defensive Riding

Meaning of defensive riding

Elements of defensive riding

Observation

Safe Following distance

Keys to safe riding



# Chapter 10 Customer Care

- Meaning of Customer Care
- Customer care objectives
- Passengers
- Commercial pressure
- Transportation of the elderly and those with disabilities
- Poor public behaviours to avoid



# Chapter 11 Accidents and unsafe situations

- At the road traffic accident scene
- First aid on the road
- Other unsafe situations



# HIV/AIDS Prevention and Care

- HIV/AIDS Challenge and Mobile People
- Meaning of HIV antibody positive
- HIV/AIDS prevention methods
- Voluntary Testing and Counseling (VCT)
- Care for people living with HIV and AIDS





MINISTRY OF WORKS AND TRANSPORT

# MOTORCYCLE RIDERS' MANUAL



Thank  
You