



***NATIONAL ASSOCIATION
FOR
MEDIUM AND SMALL SCALE CONTRACTORS***

**THE ROLE OF
ASSOCIATION/CONTRACTORS
IN
ROAD WATER HARVESTING**

**RADDISON BLU HOTEL - LUSAKA
(26th JULY 2017)**

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TOPIC

*THE ROLE OF THE ASSOCIATION/CONTRACTORS IN
ROAD WATER HARVESTING*

PRESENTATION OUTLINE

- **OBJECTIVES OF PRESENTATION**
- **DEFINITIONS AND INTERPRETATIONS**
- **PREAMBLE**
- **About NAMSSC**
- **THE ROLE OF THE ASSOCIATION/CONTRACTORS IN ROAD WATER HARVESTING AND MANAGEMENT**
- **CONCLUSION**

OBJECTIVE OF THE PRESENTATION

To Enable Participants understand the role of the Association/Contractors in Road Water Harvesting and Management

PREAMBLE

“WATER IS THE WORST ENEMY OF THE ROAD”

THE REASON A ROAD IS DESIGNED AND CONSTRUCTED WITH DRAINAGE ELEMENTS SUCH AS CAMBER, SIDE/BACK SLOPES, SIDE DRAINS, MITRE DRAINS, CULVERT ETC; IN ORDER TO SHED OFF WATER FROM THE ROAD.

THEREFORE, THE GENESIS OF THE ROLE OF ASSOCIATION/CONTRACTORS IN ROAD WATER HARVESTING.

Running water is the primary force affecting road condition and generating the need for maintenance.

Economical maintenance means dealing effectively with water, but not just surface runoff - Standing water, seeping water, rain and even a lack of water can contribute to road maintenance needs.

PREAMBLE

Water can be a nuisance. However, it is also a valuable natural resource.

Therefore, as Zambia becomes more populated, the demand for water increases and the available supply shrinks; practical measures for road water harvesting become increasingly beneficial and sustainable.

This presentation highlights the role of the Association/Contractor in harvesting water from roads as an important aspect of construction, and rehabilitation and maintenance activities.

DEFINITIONS/INTERPRETATION

NAMSSC – NATIONAL ASSOCIATION FOR MEDIUM AND SMALL SCALE CONTRACTORS

WHAT IS A ROAD?

According to the Public Roads Act No. 12 of 2002; A “Road” means any **highway**, and any other road to which the public have access and any public place to which vehicles have access and any road in any residential area, whether access to it is restricted or not, which is part of a local authority area and includes any **bridge, causeway, dam, ditch, drain, embankment, fence, ferry pontoon, ford, culvert** or other work in the line of the road.

DEFINITIONS/INTERPRETATION CONT'D

According to the Water Resources Management Act No. 21 of 2011

“Water” means water in its natural state, including—

(a) Surface Water;

(b) Water which rises naturally on any land or drains or falls naturally on to any land, even if it does not visibly join any watercourse; or

(c) Ground Water;

“Surface Water ” means all water found on or below the bed of a water resource and includes water in storage works, drainage works or permanent pools;

“Sustainable ”, in relation to water, means the human use of a water resource so that it may yield the greatest continuous benefit to the present generations while maintaining its potential to meet the needs and aspirations of future generations;

DEFINITIONS/INTERPRETATION CONT'D

WHAT IS RAIN WATER HARVESTING

Rainwater harvesting is defined as the collection of water from surfaces on which rain falls, and subsequent storage of this water for later use (Sustainable Earth Technologies, 1999).

The practice of harvesting rainwater is an old tradition adopted in many parts of the world, as well as a new technology that is growing in popularity. Rainwater harvesting is a technology which is traditional in some parts of Zambia. It is done on an ad hoc, very low tech basis usually by placing buckets under the eaves to catch rain during storms/storing the water in containers such as old 210 l oil drums.

WHAT IS ROAD WATER HARVESTING?

It is the diversion of runoff water from the road into channels/canals and distribution into ditches/basins or farmland for fruit tree or crop production.

The National Council for Construction Act No. 13 of 2003 defines a “Contractor” as a person, or body of persons, who undertake(s) to execute and complete construction works.

ABOUT NAMSSC

- ▶ NAMSSC was formally registered under Section 7 (1) of the Societies Act, CAP 119 of the Laws of Zambia on 11th April 2001, at Lusaka (Registration No. ORS/102/35/2332);

ABOUT NAMSSC CONT'D

- ▶ NAMSSC is currently one of the only two (2) Associations in Zambia recognized by the National Council for Construction Act No. 13 of 2003 as representing contractors' interests – and has one (1) nominated representative on the Board of Directors of the National Council for Construction;

ABOUT NAMSSC CONT'D

- ▶ The Association is the only National Representative for the Micro, Small and Medium Scale Contractors in Zambia with **Over 900 Members** in all the ten (10) provinces; it seeks to promote, solicit and lobby for contractors' interests in the construction sector by engaging the Government, Funding Agencies, and other Cooperating Partners for purposes of Contractor Development or Capacity Building.

VISION

To be a leading National Association in Promoting and Serving Medium and Small Scale Contractors' Interests in Zambia

MISSION

TO CREATE A PLATFORM FOR MEMBERS TO VOICE
OUT THEIR CONCERNS SO AS TO ENSURE A FAIR,
TRANSPARENT AND LEVEL PLAYING FIELD TO
ENABLE THEM COMPEPETIVELY PARTICIPATE IN
WORKS CONTRACTS AND PRODUCE COST
EFFECTIVE QUALITY SERVICES THEREBY
CONTRIBUTE TO DECENT EMPLOYMENT
GENERATION AND THE NATION'S
INFRASTRUCTURE DEVELOPMENT

OBJECTIVES OF THE ASSOCIATION

The objectives include the following:

- ▶ To provide and sustain a platform for members to address issues of common interest geared towards achieving the goal of promoting and development of a fair and competitive construction industry;
- ▶ To lobby and advocate for an enabling procurement and contracting environment;
- ▶ To initiate and lobby for training of its members in various construction related courses;
- ▶ To solicit for support for members' capacity building programmes;
- ▶ To promote cordial working relationship between members and their customers;
- ▶ To ensure that goods and services provided by members are of highest standards and quality and not a danger to the general public;
- ▶ To promote and contribute to accountability and transparency in the construction industry;

PROVISIONS IN THE PUBLIC ROADS ACT NO. 12 OF 2002

BEFORE DISCUSSING THE ROLE OF THE ASSOCIATION/CONTRACTORS IN ROAD WATER HARVESTING; IT IS IMPORTANT TO LOOK AT AND REFLECT ON THE FOLLOWING PROVISIONS;

SECTION 4 (1) The function of the Agency shall be to plan, manage and coordinate the road network in the country;

(2) Without prejudice to the generality of subsection (1) the Agency shall-

(a) Carry out routine and emergency maintenance of public roads through its employees or independent Contractors;

(b) Prepare and award contracts and certify works for public roads;

(p) Carry out any other activities relating to roads which are necessary or conducive to the performance of its function

**PROVISIONS IN
THE PUBLIC ROADS ACT NO. 12 OF 2002
POWERS OF THE ROAD DEVELOPMENT AGENCY**

SECTION 5:

**FOR PURPOSES OF PERFORMING ITS FUNCTIONS THE AGENCY SHALL
HAVE POWERS TO-**

- (f) Undertake ancillary works**
- (g) Construct, maintain and control storm water drains**
- (l) Prevent damage to roads.**

PROVISIONS IN THE PUBLIC ROADS ACT NO. 12 OF 2002

DISPOSAL OF STORM WATER

According to Section 29(1), A Road Authority is consultation with owners or occupiers concerned may construct in or any road for which it is responsible, culverts, ditches or other works for diversion of storm water or under any road into adjoining land.

Furthermore, Subsection (2) provides that “The Road Authority shall pay the owner or occupier of the land concerned for any loss or damage caused by water diverted under subsection (1)

THE ROLE OF THE ASSOCIATION/CONTRACTORS IN ROAD WATER HARVESTING

- PARTNERS IN THE IMPLEMENTATION OF ACTIVITIES RELATED TO ROAD TO WATER HARVESTING AND MANAGEMENT THROUGH THE PUBLIC PRIVATE PARTNERSHIP (PPP)
- TO CREATE A PLATFORM FOR STAKEHOLDERS' INTERACTION
- CONDUCT SENSITISATION AND AWARENESS CAMPAIGN ON THE NEED TO ADOPT ROAD WATER HARVESTING TECHNIQUES
- ADVOCATE AND LOBBY FOR POLICIES AND LEGISLATION THAT FAVOUR ROAD WATER HARVESTING IN ROAD CONSTRUCTION, REHABILITATION AND MAINTENANCE
- EXECUTE THE VARIOUS WORKS DESIGNED TO HARVEST ROAD AND CARRY OUT MAINTENANCE REPAIRS TO THE STRUCTURES

THE ROLE OF THE ASSOCIATION/CONTRACTORS IN ROAD WATER HARVESTING

- **CONTRACTORS ARE CURRENTLY INVOLVED IN UNDERTAKING ROUTINE MAINTENANCE WORKS**
- **PLATFORM FOR TRAINING IN ROAD WATER HARVESTING TECHNIQUES; TRANSFER OF TECHNOLOGICAL SKILLS IN ROAD WATER HARVESTING**
- **PLATFORM FOR KNOWLEDGE SHARING IN ROAD WATER HARVESTING AND NETWORKING**
- **CREATE LINKAGES BETWEEN THE COMMUNITIES ESPECIALLY FARMERS AND CONTRACTORS**
- **CREATION OF DECENT JOBS FOR YOUTHS AND WOMEN LIVING IN THE VICINITY OF THE ROADS BY ENGAGING THEM TO WORKS ON DRAINAGE FACILITIES WHICH SUBSEQUENTLY ACT AS CONDUITS FOR HARVESTING THE WATER**

Conclusion

Road Water Harvesting requires collaboration

Contemporary players in road water harvesting; government ministries and departments, academia, international and non-profit organizations; can expand its reach and effectiveness by collaborating, exploiting existing experiences, and working across sectors.

The private sector players, Associations/Contractors, also have an important role to play in the implementation and promotion of road water harvesting through the provision of technological skills for water storage, distribution and treatment, and in the development of the entire value chain and market linkages. Therefore, better connections with applied research are needed to quantify and consolidate evidence of costs and benefits of road water harvesting, addressing demands and issues such as:

Who meets the costs?

Distribution of benefits;

The effects on communities and ecosystems at landscape scale;

What are long term financial, institutional, environmental, technological, and social sustainability?

***THANK YOU
FOR
YOUR ATTENTION***

GOD BLESS YOU ALL