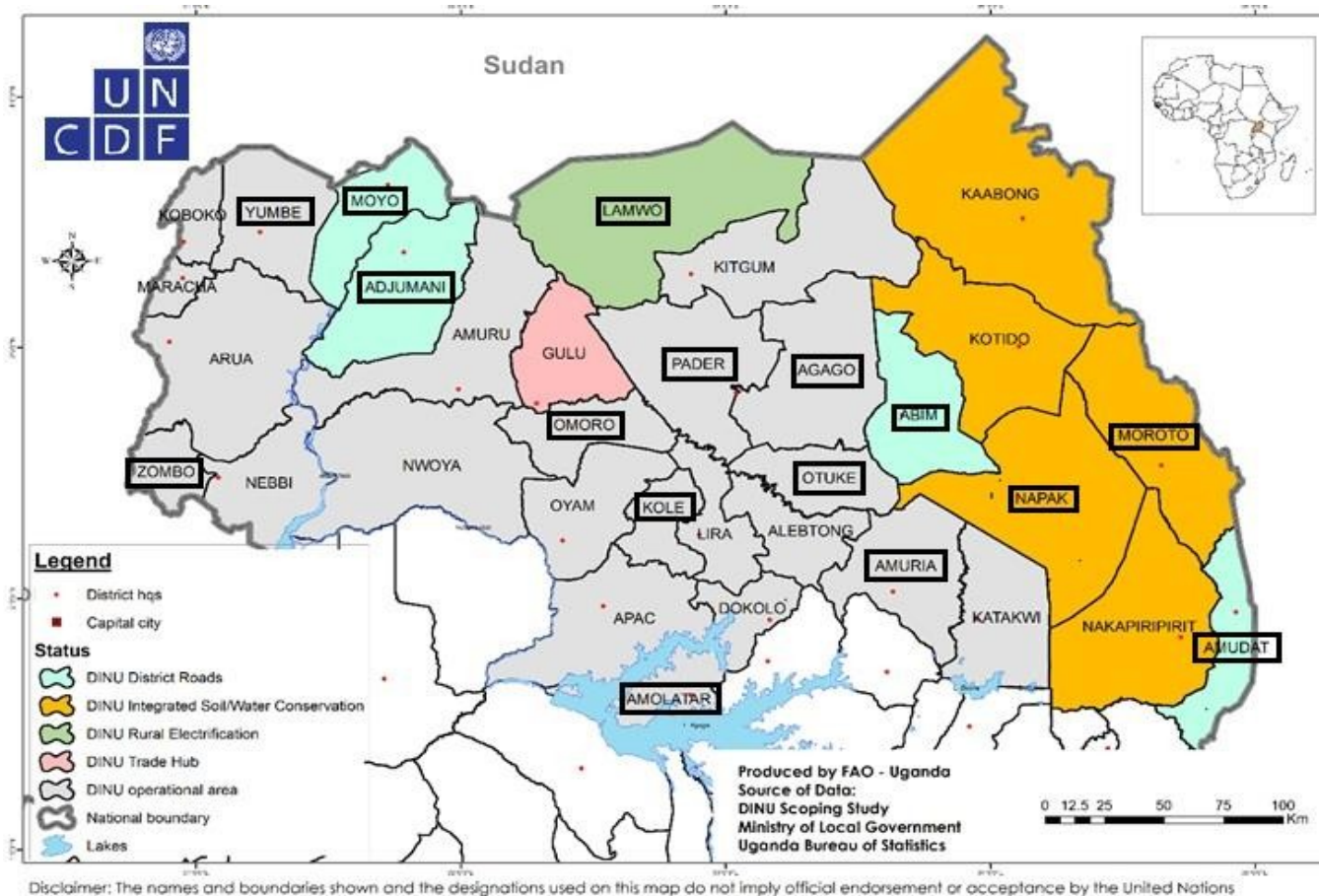




Consulting Services: Technical Assistance to the District Local Governments of Abim, Adjumani, Amudat and Moyo to carry out Rehabilitation of District and Community Access Roads

Location map



Field Report Presentation

17th April 2019

at MoWT Boardroom, Kampala

By:
Pietro Zelante (Team Leader/Senior
Project Engineer)

A project implemented by:





Consulting Services: Technical Assistance to the District Local Governments of Abim, Adjumani, Amudat and Moyo to carry out Rehabilitation of District and Community Access Roads

Presentation Outline

1. Project Background

2. Introduction

3. Adjumani field findings

4. Moyo field findings

5. Abim field findings

6. Amudat field findings

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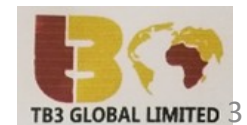
Consulting Services: Technical Assistance to the District Local Governments of Abim, Adjumani, Amudat and Moyo to carry out Rehabilitation of District and Community Access Roads

Project Background

The European Union through its 11th European Development Fund in collaboration with the Government of Uganda has launched the Development Initiative for Northern Uganda (DINU), an integrated development programme which aims at addressing, the key development challenges in the Northern Uganda. The region is faced with challenges: poverty, issues of good governance and democratic process to improve service delivery.

DINU will implement activities aimed at unlocking trade within the region, country, and with neighboring countries through the improvement of transport infrastructures.

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Introduction

The Consultant carried out the consultations and field work from 18th to 28th March 2019. The field studies for the project roads commenced on the 18th, March 2019 from Adjumani district, then to Moyo district on the 20th March, then to Abim district on 25th March, and finally to Amudat district on 27th March 2019.

This presentation highlights the field findings, challenges and comments for some roads



Field visit at Unna-Miniki road-Adjumani district



Meeting at Zawadi Hotel in Adjumani district



Unna-Miniki Road (13.3km):

This district road(class I) traverses Pacara, Pakele and Dzaipi Sub- counties.

Challenges

- Rock out-crop sections (ch3+00-6+00), ch7+200-8+100, 9+00-9+200, along the road corridor
- No drainage structures at most catch basins
- Gulley erosion along the road surface(ch12+00-13+00)

Proposed solutions

- Rock blasting
- Design for drainage structures
- Drainage improvement



Eroded road surface(ch 12+00-13+00);impassable road section



Adjugopi-Nyeu Road(24.49km): This district road(class I) traverses Pacara, Pakele and Dzaipi Sub- counties.

Challenges

- Rock out-crops(ch 0+200,7+800-7+900) all along the road corridor;
- Broken and silted culverts;
- Low lying section (ch 14+00-20+900);flood prone along river Nile banks;
- Under-designed Culvert crossings (ch 14+00-23+00); and
- Poor condition head and wing walls.

Proposed solutions

- Rock blasting;
- Redesign drainage structures;
- Raise road profile at low lying sections;
- Provide catch water drains; and
- River training.



Narrow Stream crossing(ch 4+500); no head walls



Pachara-Ogujebe road (11.34km);

This district road(class I) starts from Eleukwe and ends in Ogujebe. It traverses Pacara sub county.

Challenges

- Flood zone (ch 7+050-7+150); and
- Damaged stream crossing(4x900) at Robibire stream(ch 3+100).

Proposed solutions

- Raise road surface;
- Provide catch water drains;
- Consider shifting alignment;
- Design for drainage structures; and
- River training.



Damaged stream crossing(ch 3+100)



Ofua T.C-Pakwinya road (8.16km);

This is a district road (class III).It traverses Ofua Sub County
Challenges

- Narrow road section(1-2.5m width) at (ch 2+00-4+500);
- Heavily eroded stream approach;
- Horizontal curve towards stream;
- Stream without a drainage structure at ch 4+600;and
- Impassable road section at ch 4+600.

Proposed solutions

- Design for drainage structures;
- River training; and
- Alignment diversion upstream.



Eroded stream approach(ch 4+600)



Loa-Liri loop road (12.2km);

This road starts from Loa and ends in Liri. The road is generally in a fair condition. It traverses Ukusijoni and Itirikwa Sub Counties.

Challenges.

- Rock out-crop sections within the road corridor (ch1+600-2+400, 3+300, 3+700, 7+300, 7+600 & 9+700).

Proposed solutions

- Rock blasting.



Rock along road corridor(ch 1+600-2+400)



Magburu P/S - Kobo Landing site (9.46km);

This district road(class III) starts from Magburu and ends in Kobo. It traverses Ciforo Sub County.

Challenges

- Rock out-crop (ch 0+800, 3+600, and 7+500).
- 300m long swamp (towards river Nile).
- Broken culverts.

Proposed solutions

- Rock blasting
- Raise road profile during geometric design
- Redesign for drainage structures



rock and broken culverts(ch 3+600)



Moyo District field findings

Opiro-Orokombaa road (2.82km);

This district road(class II) starts from Opiro and ends in Ramogi. It traverses Moyo sub county.

Challenges

- Streams at ch 0+480,0+600, 1+600, 2+100, & 2+300 without drainage structures; and
- Rock out-crops at ch 2+350.

Proposed solutions

- Design for drainage structures;
- Rock blasting; and
- River training.



Ebihwa stream(ch 0+480); no drainage structure



Mawa Road-Orokombaa(3.18km);

This district road(class II) starts from Ramoji and ends in Chilichili. It traverses Moyo sub county.

Challenges

- Streams at ch 1+200 and 1+500; No drainage structure; and
- Stream at ch 1+800 (8m wide).3*1200mm metallic culverts, structure damaged.

Proposed solutions

- Re-design for drainage structure
- River training



Damaged stream drainage structure(ch 1+800)



Celecelea-Lama-Gbalala road (11.92km); This district road starts from Celecelea and ends in Gbalala and it traverses Moyo and Laropi Sub counties.

Challenges

- Seasonal Stream (ch 7+300); 4*900 metallic culverts, exposed and not functioning;
- Seasonal Stream (ch 9+200); 2*900mm metallic culverts, damaged;
- Rocky surfaces along and within the road corridor (ch 8+500-9+300, 9+500-11+100); and
- Abnormally steep slopes (10%-30%);section (ch 9+500-11.100).

Proposed solutions

- Re-design drainage structures;
- Rock blasting; and
- Alignment diversion.



Rocky surface and steep slope (27%)-ch 9+500-11+100;



Laropi-Parolinya rd(18.55km);

This district road(class I) starts from Laropi and ends in Palorinya. It traverses Laropi, Itula Sub counties.

Challenges

- Seasonal Stream(ch 1+900), no drainage structure;
- Seasonal stream (ch 2+400), 5*1200 cp culverts, damaged;
- Structurally failed Amua bridge(ch 5+00); and
- Rocky surface(ch 9+700-10+200).

Proposed solutions

- Design and re-design of drainage structures; and
- Rock blasting.



Failed Amua bridge (ch 5+00)



Dongo-Morobi-Kotchi Boma rd(10.21km);

This district road(class II) starts from Dongo and ends in Boma. It traverses Itula sub-county

Comments

- Section 0+00-8+00 has been graveled by UNHCR. In a solely good state; and
- Carry out quality control tests.

Challenges

- No drainage structures at the last 2km(8+00-10+00); and
- Kochi stream(10+00), no drainage structure.

Proposed solutions

- Design of drainage structures.



Kochi stream (ch 10+00)without drainage structure



Aluru-Palorinya rd(17.17km);

This district road(class II) starts from Aluru and ends in Palorinya. It traverses Moyo and Itula sub counties.

Challenges

- Rock out-crop(ch 4+100, 4+300, 8+400-8+700, 9+300-11+500, 12+100);
- Rocky surface(ch 6+800-7+400,12+500-14+800);
- steep slopes(10%-23%); and
- Seasonal streams(ch 12+900 &13+900) without drainage structures.

Proposed solutions

- Rock blasting;
- Design of drainage structures; and
- Alignment diversion from ch 13+500.



Rocky surface and steep gradient (10%-23%) at ch 13+500



Abim District field findings

Alerek-Katabok-Lotuke(41.1km): This district road(class I) stretches from Lotuke to Alerek. It links four sub counties that is; Lotuke, Magamaga, Morulem and Alerek

Challenges

- Vented drift(ch 3+600), fairly functioning;
- Ch 7+100; Road section edges a valley dam embankment;
- Seasonal stream(11+000), 1*600mm cp crossing, silted and inadequate; and
- Rocky surfaces along the road corridor (ch 11+500,18+400-18+500, 24+400, and 33+400).

Proposed solutions

- Re-design for drainage structures;
- Alignment diversion;
- Align rocky surfaces with concrete.



Silted vented drift(ch3+600)



Abuk-Awach rd(16.13km):

This district road(class I)links Abuk village to Agago district and It serves Awach Sub County.

Challenges

- Seasonal streams (ch 3+300, 7+300, 15+500), No adequate drainage structures;
- Seasonal swamps (ch 7+800-8+200,15+200-15+450, 15+900-16+300);
- Section from ch 12+800-16+130, Road impassable due to heavy gulley erosion; and
- Ch 16+100; 11m long Structurally failed RC bridge.

Proposed solutions

- Re-design for drainage structures; and
- Raise road surface during geometric design.



Structurally failed bridge (ch 16+100)



Adea-Nyarkidi rd(8km):

It is a district road(class III) serving Morulem Sub county.

Challenges

- Rocky surface (ch 1+100 and 1+800), rock out-crops(ch 1+400, 1+800, 2+300-2+500);
- Seasonal stream(ch 1+600), no drain facility; and
- No culvert crossings through entire road section.

Proposed solutions

- Rock blasting and aligning rocky surfaces with concrete; and
- Design for drainage structures.



Rock along road corridor(ch 2+300-2+500)



Amudat District field findings

Uingeresa-Achorichor(9.32km); It is a district road(class I) and traverses two sub-counties of Loroo and Amudat.

Challenges

- Rock out-crop (ch 0+900), rocky surface(ch3+100, 3+900-4+00);
- Gulley erosion (ch 2+200-2+300,3+500-3+800,5+100-6+200);
- Lomeripus swamp (ch 7+200-7+400); and
- Lomeripus seasonal stream (ch 7+300), vented drift ;operational.
- **Proposed solutions**
- Rock Blasting and align rocky surfaces with concrete.
- Raise road surface at swampy sections
- Design for adequate drainage structures



Gulley erosion along road surface(ch 3+500-3+800)



Lopedot-Nakipom(6.98km):

It is a district road(class I) and It links Loroo and Amudat Sub-Counties.

Challenges

- Gulley erosion along the road surface (ch 0+900-1+00, 2+300-3+200); and
- Lopedot seasonal stream (ch 4+400), Lokokor twin seasonal stream(ch 6+400) and minor stream(ch 5+400), all without drainage structures.

Proposed solutions

- Design for drainage structures.



Lokokor twin seasonal stream (ch 6+400 and 6+500); No drainage structures



Karita-Naporokocha-Moruajore(16.98km):

It is a district road(class III) linking Karita and Amudat Sub-Counties to Namalu subcounty in Nakapiripirit district.

Challenges

- Drift(ch 0+100), operational;
- Rock out-crops (ch 1+600 and 2+500); and
- Chepenyiny seasonal stream, damaged vented drift.

Proposed solutions

- Rock blasting; and
- Design for adequate drainage structures.



Chepenyiny seasonal river crossing(ch 12+300)



Environmental Impact Assessment

Preliminary findings from the scoping exercise

- Loss of biodiversity especially flora species along the road widening areas.
- Road construction equipment and vehicles will generate dust, a health nuisance to the public.
- Vehicular emissions for instance carbon monoxide whilst equipment and vehicles are running.
- Animal kills particularly small rodents as well as accidental knock down of domesticated stray animals.
- Change of land use.
- Destruction of flora biodiversity will result into loss of habitats especially for birds.
- Microclimate modifications as a result of increased vegetation clearing and gaseous emissions



Environmental Impact Assessment Cont'd

Preliminary findings from the scoping exercise Cont'd

- Vibration impacts – running of equipment like compactors will result vibrational impacts to the public.
- Issues relating to land wrangles.
- Potential occurrences of accidents due to vehicular movements.
- Generation of noise beyond the permissible levels.
- Social vices arising from workers' camps.
- Soil and water contamination accruing from fuel/oil leakage



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Thank You for Listening

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