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SUSFISH WP 3 : Fish and Macroinvertebrates Activity and results

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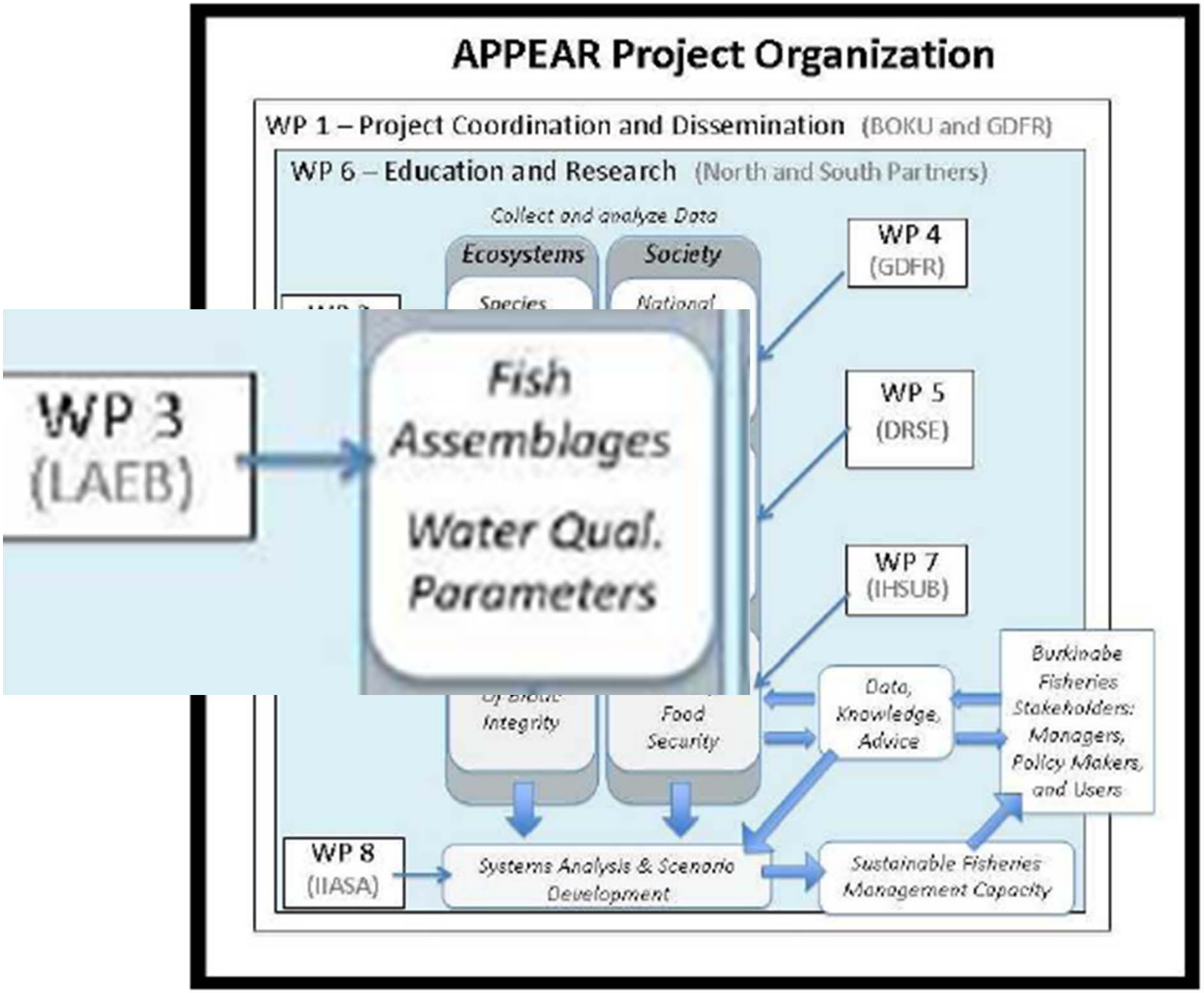
Expected to start in November 2012, our SUSFISH activities really started in March 2012 with the Kick off meeting in March 2012.

During this workshop we discussed the collaboration between project partners, methodology and agreed on a schedule


APPEAR Project Organization
WP 1 – Project Coordination and Dissemination (BOKU and GDFR)
WP 6 – Education and Research (North and South Partners)
Collect and analyze Data
Ecosystems
Society
WP 4
(GDFR)
WP 5
(DRSE)
WP 7
(IHSUB)
WP 3
(LAEB)
Fish Assemblages
Water Qual. Parameters
Integrity
Food Security
Data, Knowledge, Advice
Burkinabe Fisheries Stakeholders: Managers, Policy Makers, and Users
WP 8
(IIASA)
Systems Analysis & Scenario Development
Sustainable Fisheries Management Capacity

WP3- Fish assemblages and water quality parameters

Activity 3.1 – Base line Survey and sampling design development

Activity 3.1 – Training Needs Assessment and application of training to staff members

Activity 3.3 to 3.6 – Sampling chemical, environmental, fish, macro-invertebrates data in the field.

Activity 3.1 – Modeling the functioning of aquatic ecosystems

Activity 3.1 – Base line Survey and sampling design development

- Methodology defined in March 2012
  - 14 study area selected

	Study area	River catchment	Sites
1	Yacouta	Niger	Yacouta
			Dori
2	Higa	Niger	Higa
3	Tapoa	Niger	Tapoa
4	Bam	Nakanbe	Multiple
5	Bagré	Nakanbe	Bagré
			Multiple
6	Koubri	Nakanbe	Badnogo
7	Nazinga	Nakanbe	Multiple
8	Sourou	Mouhoun	Multiple
9	Boromo	Mouhoun	Boromo
10	Boura	Mouhoun	Multiple
11	Kou	Mouhoun	Kou
12	Lera	Comoé	Lera
13	Cascades	Comoé	Multiple
14	Moussodougou	Comoé	Moussodougou

Activity 3.1 – Base line Survey and sampling design development

- From March to December 2012 :
  - 9 of the 14 sampling area selected have already been visite
  -
  - 6 area from March to October 2012
    - Boura, Kou, Lera, Cascades, Moussodougou
  - 3 area in October to December 2012
    - Bagré, Koubri, Nazinga

- Three of four watersheds were visited
  - Mouhoun, Nakambé et Comoé

Activity 3.1 – Base line Survey and sampling design development

- 5 sites no visited
  - Because of accessibility in the rainy season

	Study area	River catchment	Sites
1	Yacouta	Niger	Yacouta
			Dori
2	Higa	Niger	Higa
3	Tapoa	Niger	Tapoa
4	Bam	Nakanbe	Multiple

WP3.2 – Training need assessment and application

- Two training sessions and exchanges
  - March 2012
  - October 2012

- Theoretical courses on :
  - Methodology and study design,
  - Data mining and statistics in aquatic ecology
  - Ecological Assessment Methods

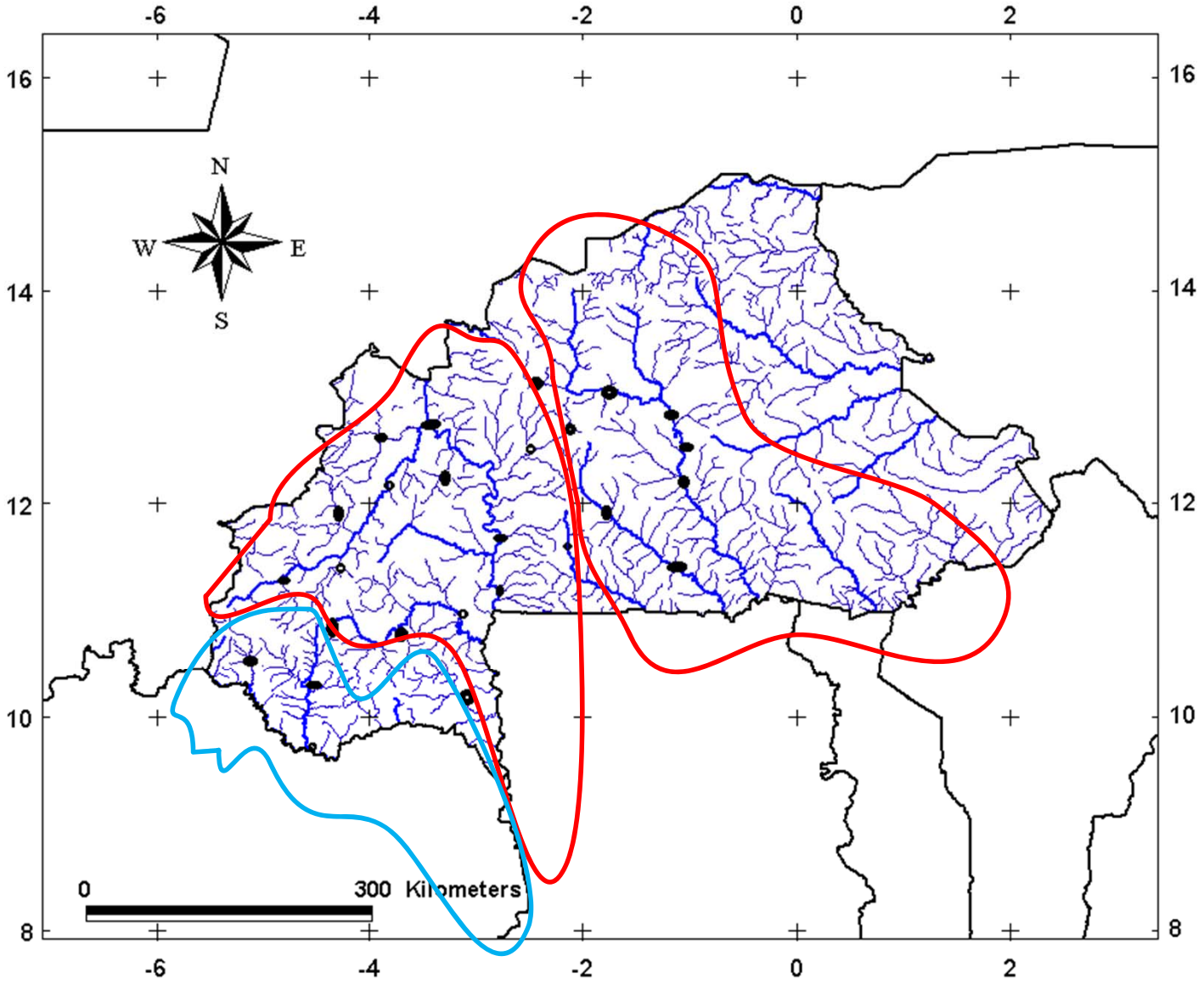
- Practical activities
  - Sampling Fish, MI, Chemical and Environmental da
  - Cascades, Koubri, Ziga Loumbila

- Red list criteria (UICN)

Activity 3.3 - 3.6 – Sampling data in the field

Methodology

- Adopted in March 2012,
- Pooling of resources between the two teams (macro-invertebrates and fish) :
  - Share some information and help each other.
  - Save money and optimize efforts


-6
-4
-2
0
2
16
14
12
10
8
N
W
E
S
0
300 Kilometers

Our team

- 10 students
- 3 Car drivers
- 4 Superviseurs
- 1 fisherman
- Xx local fishermen
- Xx local foresters

- Approximately 60% of the work was done according to schedule in March 2012 (4 four sampling campaigns)

  - From 2 to 11 July 2012:
    - Comoé river : Tingrela, Karfigela, Moussodougou (Lake, River, Canal)
    - Mouhoun river : Wè (Upstream and Downstream), Kou, Guinguette, Mare aux hippos.

  - From August 29 to September 02 2012:
    - Mouhoun river : Boura (Lake and River sections).

  - From September 28 to October 5, 2012:
    - Sourou river : Di, Niassan, Gouran (Irrigation canals, Rivers, Flood plain)
    - Mouhoun river : Leri

  - October 14 to 25: the team was reinforced by four BOKU students
    - Nakanbé river : Ziga, Loumbila, Koubri, Bagré, Nazinga

Results – The ichtyofauna

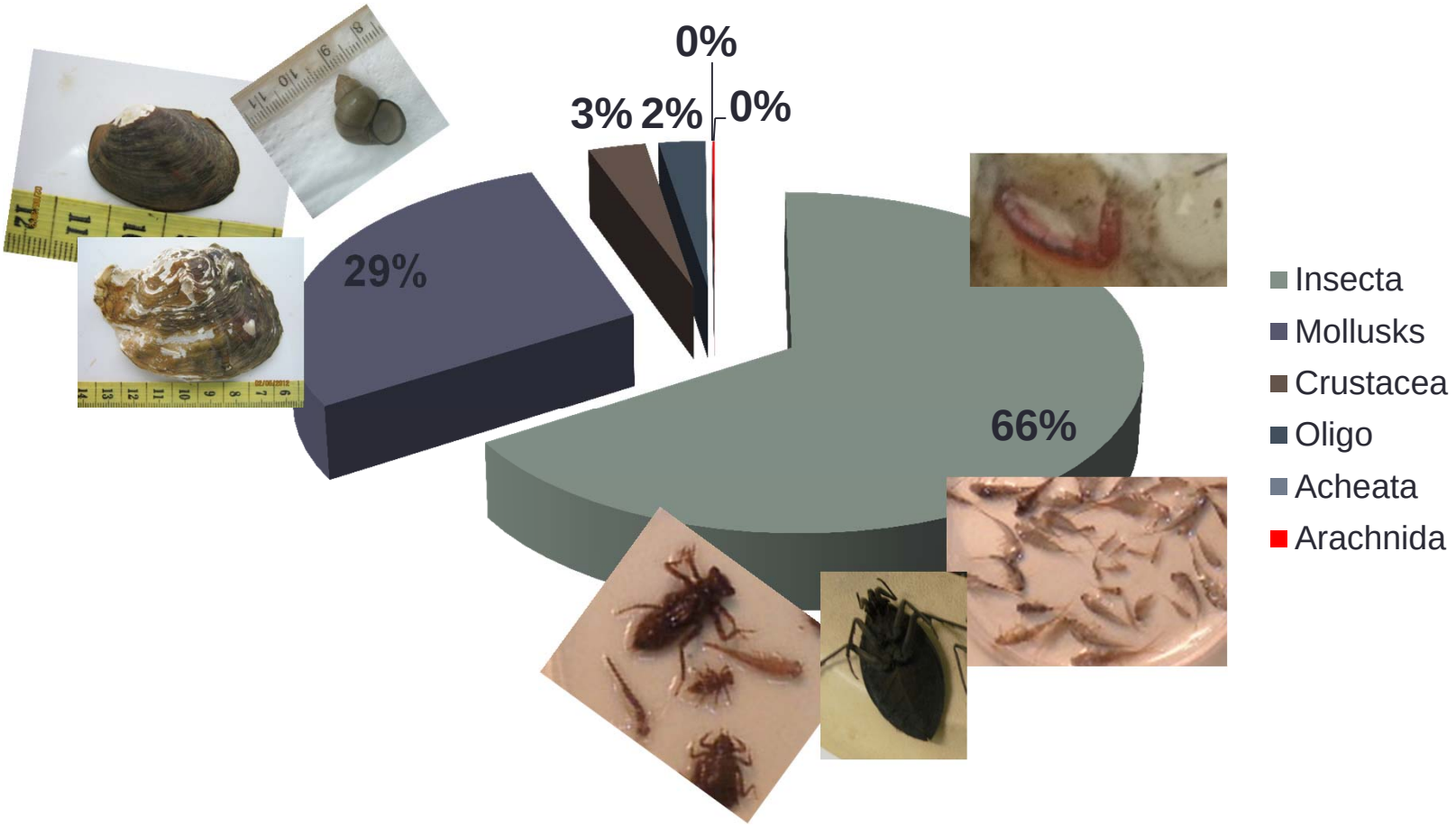
- More than 3000 specimens captured

- 47 species belonging to 19 families
- Sourou :47
- Comoé : 30
- Mouhoun (Boura) : 36
- Koubri, Nazinga and Bagré : 70

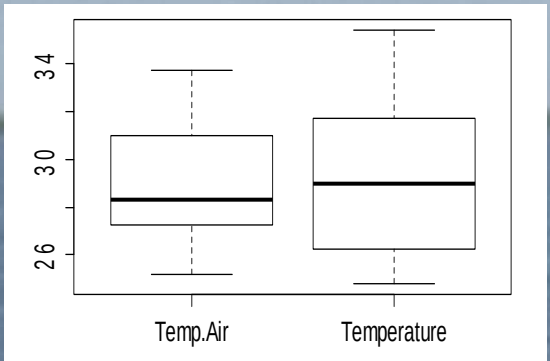
- Some specimens remains unidentified
- Tilapia, Alestes, Barbus, Petrocephalus,
- Hemichromis, Labeo, Synodontis,
- Oreochromis, Sarotherodon

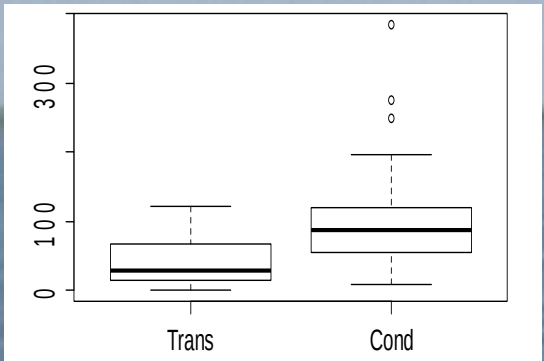
Results – Macro-invertebrates

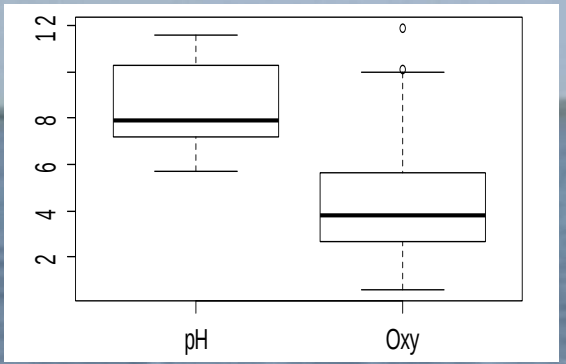
- 61 families with 49 insects families

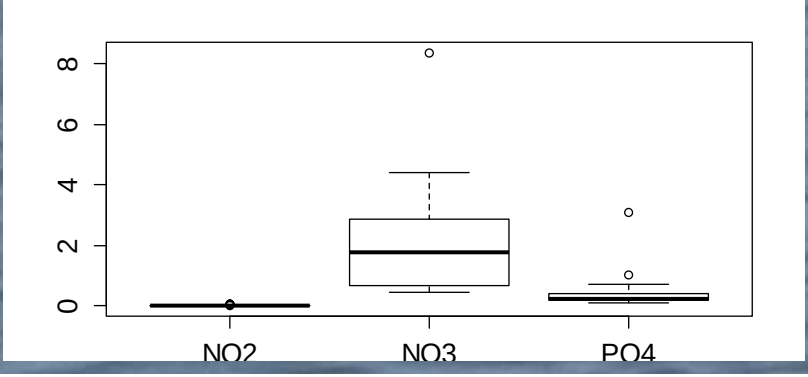


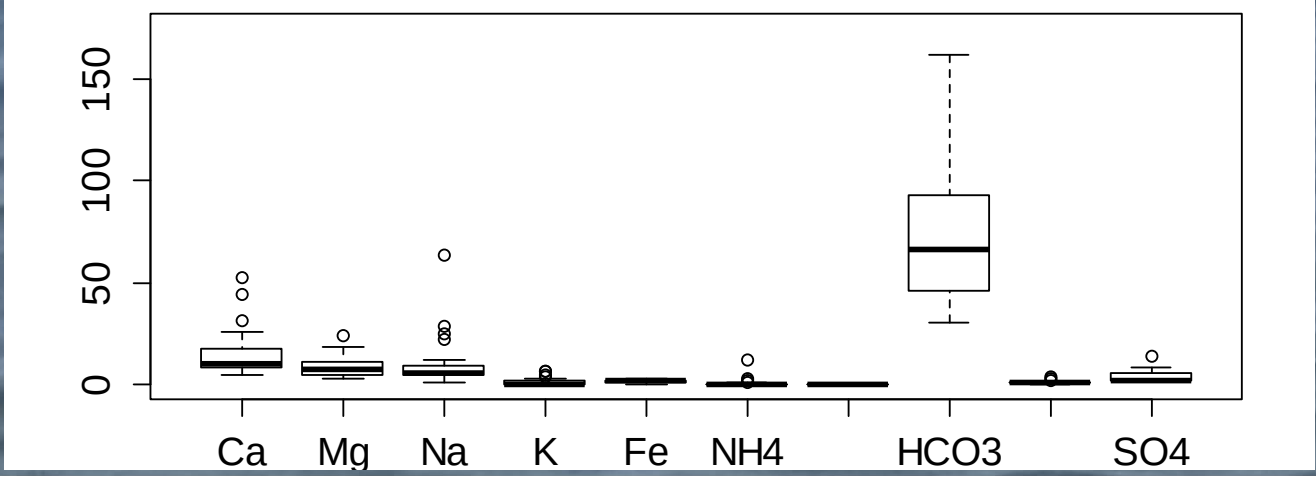
Results – Chemical data





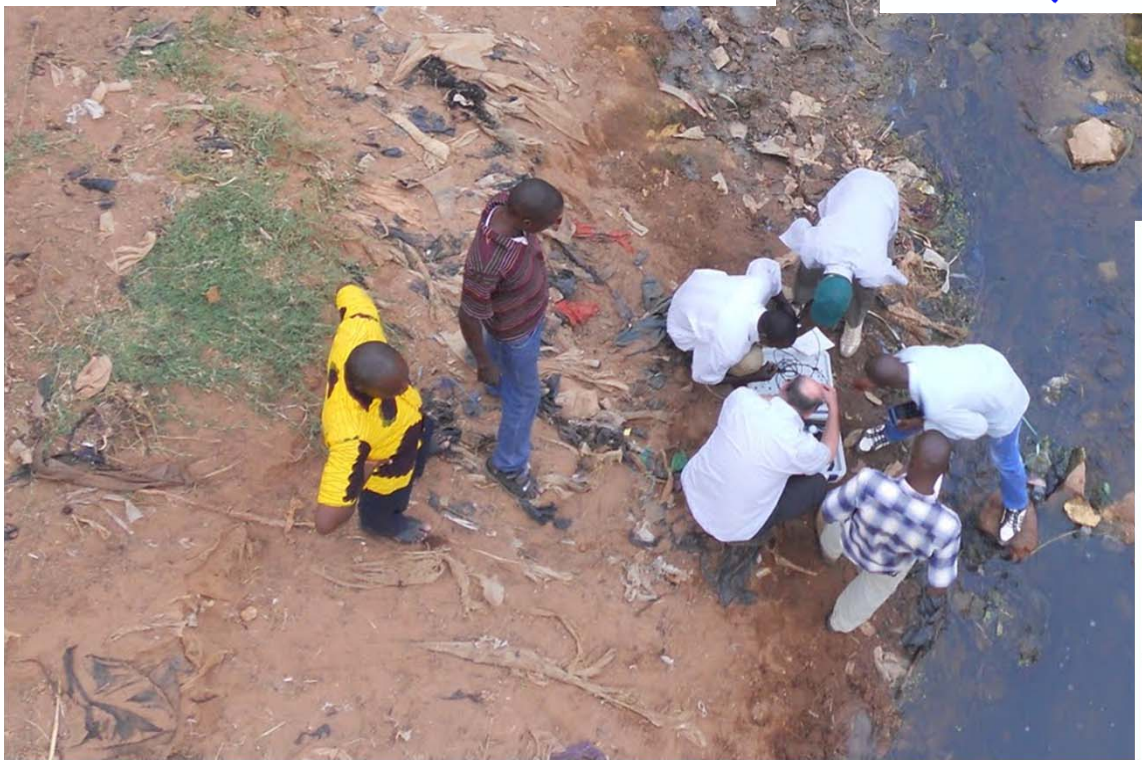


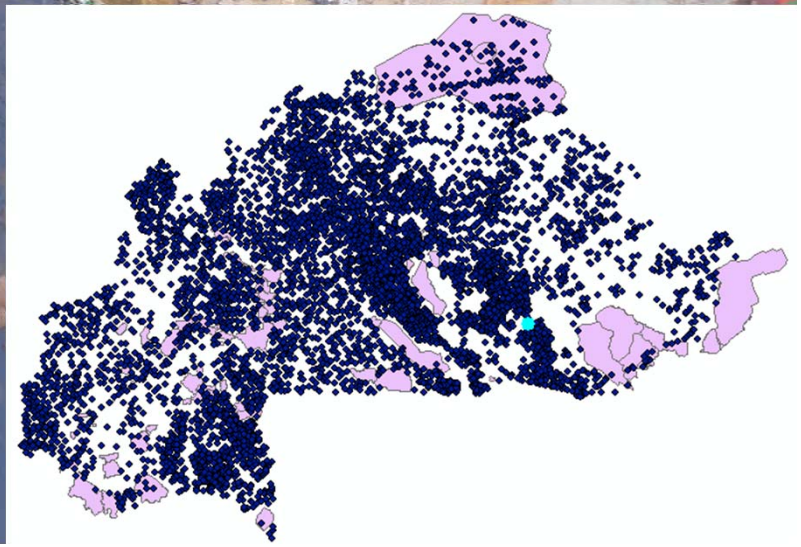




Results : Environment and pressures

- Field protocols
- GIS Data





Future steps

✓Finish sampling

✓Data analysis

✓Publications

Thank you to all parterns

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