Ethiopian Data Literacy and Community Development
Post Workshop Environment

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IDW2018, Gaborone, Botswana

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Introduction

Data Literacy and Community Development

- Digital literacy redefines literacy skills as well as academic work and tradition.
- The digital era equalises traditional and young universities.
- Computational skills help researchers to get their work done in less time and with less pain.
- But, good training resources for researchers looking to develop these skills are scarce.
Data Litercy and . . .

- Moreover, training in data and computational skills is still largely absent from researcher in their undergraduate and graduate programs.
- Hence, a series of workshops to the topic “increase digital literacy for the researchers” had been delivered for young Ethiopian researchers to fill the gap.

Up to the now:

- more than 600+ researchers and librarians have been trained and
- more than 400+ researchers and librarians will be trained till the end of the year.
The Carpentries Workshops

Regular Trainings

Figure 1: The carpentries

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The Carpentries Workshops

Train the trainers

- We have done 28 carpentries workshops till now.
- We have organized train the trainer (ttt) workshop for:
  - more than 23 participants from 23 Ethiopian Universities and
  - 3 international participants of H3ABioNet from Sudan, Uganda, and Kenya.
- We have been organizing the 8 Data and 8 software carpentry workshops till the end of the year.
The Carpentries Workshops . . .

Train the Trainers . . .
The Carpentries Workshops...

R-Ladies Chapters...

Welcome to R-Ladies Addis!

LET'S BUILD A VIBRANT R COMMUNITY IN ETHIOPIA
The type of workshops in percentage

- DC: 57.14%
- LC: 14.29%
- SWC: 28.57%

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Type of Workshops

The Carpentries Workshops

Number of Workshop

<table>
<thead>
<tr>
<th>Carpentries</th>
<th>DC</th>
<th>LC</th>
<th>SWC</th>
</tr>
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<tbody>
<tr>
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<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>ttt</td>
<td>15</td>
<td>0</td>
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</table>

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Future Workshops By Locations
The question was assessing the outcome of the post-workshops environment to improve researchers’ work practices.

The main goal of the resulting survey was to ask our learners to describe concrete changes they had implemented to their research practices as a result of completing a Carpentries workshop.

- Questionnaires were developed and sent out to workshop organisers to collect answers from previous Carpentry Workshop participants and librarians.
- The questionnaires were covered the Carpentry workshops experiences and with applied approach with some tests to captured the results.
Post-Workshop Environment Assessment findings

Data management and analysis skill level before workshops

The scale data management and analysis skill level before Scales 1 2 3 4 5

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Post-Workshop Environment Assessment findings

Data management and analysis skill level after workshops

The scale

<table>
<thead>
<tr>
<th>Scale</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>3</td>
<td>3.33%</td>
</tr>
<tr>
<td>4</td>
<td>56.67%</td>
</tr>
<tr>
<td>5</td>
<td>40%</td>
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</table>
Post-Workshop Environment ...

Immediately apply what I learned at the workshop

<table>
<thead>
<tr>
<th>Agree</th>
<th>Neutral</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>40%</td>
<td>13.33%</td>
<td>46.67%</td>
</tr>
</tbody>
</table>

The scale

Responses to apply what I learned
Post-Workshop Environment

Learners confidence to use the tools

Why were you attending the workshop

Apply what I learned

The scale

Agree Neutral Strongly agree

40%
13.33%
46.67%
Post-Workshop Environment

The capability to write a small program/script/ to solve a problem

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Success beyond the workshops

- Creating R-Ladies chapter at each location of the workshop
- Organizing Hackathons for researchers to:
  - increase the digital literacy of researchers and students
  - encourage them to work with data openly accessible sources and
  - improve their coding abilities through competitions for a “better Ethiopia”
Nasa space App challenge 2018 hackathon was hosted for the first time in Addis Ababa.
We had 40 participants and 20 volunteers on the event from different sectors
A team jugn from different disciplines selected two local winner
Nasa Space Apps Challenge Addis Ababa

Nasa Space apps Hackathon

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Nasa Space Apps Challenge Addis Ababa

Nasa Space App Challenge Local Winner

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Future Schools and connections

Start Foundational summer school

- To bring The Carpentries workshops one step up, we are planning:
  - Bring CODATA Summer School with specific domain area for advance topics
  - Establishment of Carpentry-Connect in Addis Ababa for both local and global connections
  - Maintaining our African Task Force participations.