

Contributions of CD4D experts to the agricultural institutes in Ethiopia

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Ethiopia: the land of origins



The origin of human: Lucy (3.2 million yrs.)



The origin of blue Nile (60% water to the Nile)

Active volcano and the hottest inhabited place on earth



ETO Ethiopia

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Ethiopian its own alphabet

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| 5 | ፭ | አምስት | Amist | 60 | ፷ | ስልሳ | Silsa |
| 6 | ፮ | ስድስት | Sidist | 70 | ፸ | ሰባ | Seba |
| 7 | ፯ | ሰባት | Sebat | 80 | ፹ | ሰማንያ | Semanya |
| 8 | ፰ | ስምንት | Simint | 90 | ፺ | ዘጠና | ZeTena |
| 9 | ፱ | ዘጠኝ | ZeTeñ | 100 | ፺፻ | መቶ | Metu |
| 10 | ፺ | አስር | Asir | 1,000 | ፺፻፺ | ሺ | Shee |



The origin of Arabica coffee





- Fastest economy growth in SSA
- Agriculture is the mainstay of the economy (NHDR2015)
 - 43% of the GDP,
 - 80% of exports,
 - 85% of the labor force
- Agriculture sector is characterized by mixed rain fed small scale farming
 - Prone to several human and natural problems
 - Variability in rainfall pattern and distribution, flooding.....
 - Land degradation, less improved technologies and agricultural inputs...
- Agriculture deserves to be of the three sectors selected by CD4D

Contribution of Ethiopian diaspora in the Netherlands to: Ethiopia's development



- Many diaspora initially showed interest to contribute through CD4D
- High diaspora contribution has primarily been to the agricultural sector
- Four CD4D experts have been participating in the agricultural sector since July 2017



Betelehem Beyene



Samuel Yenesew



Dawit Tadesse (Ph.D)



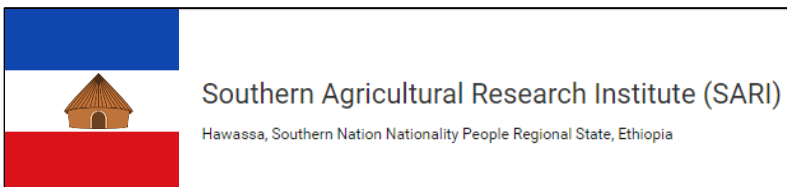
Mesfin Gebremikael (Ph.D)

- Highly appreciated by Ethiopian MFA: 'no such kind of previous diaspora contribution to agriculture'
- Less participation of the diaspora than expected? May be due to:
 - Limited choices of host institutions and topics in each sector?
 - Job vacancies by the selected HI donot often fit to the diaspora expertise?
 - Political attitude?
 - Less incentives? The allowance is sufficient only for less comfortable accommodation

CD4D assignments in the agricultural sector: the host institutes



Soil and water management directorate



Natural resource management directorate



Horticulture development directorate



Rural Job opportunity creation directorate

CD4D assignments in the agricultural sector: approaches followed



- Gap assessment through discussions with experts and managements
 - A first physical assignment at EIAR, SARI and EHAIA
 - Identifying what we can do and what we cannot
- Planning of feasible ways to filling the gaps
 - Physical assignments
 - Virtual (online) assignments
 - Exchange visit programs
- Conducting actual assignments

Approaches followed: Examples of planning @EIAR and EHAIA



V. PLANNED ACTIVITIES FOR THE NEXT PERIOD (Please provide a short summary of the activities to be undertaken in the next period.)

The following physical and virtual activities have been agreed. The dates were not decided:

- I. Virtual assignments (September 2017-March 2018)
 - The state-of-the-art and experiences of developed countries on blended fertilizers application and management (by CD4D experts)
 - Testing the actual composition of blended fertilizers in Holland (CD4D experts in collaboration with WUR or other institutes)
 - Quality control mechanisms of bio-fertilizers (by CD4D experts)
 - Techniques for acid soil management (reclamation of subsoil acidity; lime rate determination methods; reclamation of acidity in nitisol)
 - Advanced techniques in vertisol management
- II. Physical assignments (Training). (Jan –Dec 2018)
 - Techniques to calculate and enhance nutrient use efficiency (by CD4D experts at the HI)
 - Environmental impacts of inorganic fertilizers (by CD4D experts at the HI)
 - Assessment of micronutrient deficiency based on plant and soil analysis (by CD4D experts at the HI)
 - The roles of soil organisms for sustainability: concepts and techniques (by CD4D and WUR experts at HI and WUR)
 - Isolation, characterization and preservation techniques of phosphate solubilizing bacteria (by WUR and CD4D experts WUR)
 - Techniques in waste management (CD4D experts)
 - Scientific report writing (CD4D experts)
 - Basic and advanced statistical analysis (multi-locational analysis based on R software)(by CD4D and WUR experts at HI and WUR)

V. PLANNED ACTIVITIES FOR THE NEXT PERIOD (Please provide a short summary of the activities to be undertaken in the next period.)

A detailed plan about the next activities has been prepared, discussed with and approved by the deputy CEO of the HI including:

- First round training by CD4D experts at the HI for two weeks (16-30 sep 2017)
- Virtual assignment to identify water and soil management techniques (Aug-Nov, 2017)
- Proposal writing and fund raising for portable soil and water analysis laboratory equipment
- Second round training and demonstration of soil and water analysis techniques using portable equipment under field conditions (18 Nov -1st Dec 2017 depending on the availability of equipment)
- Third round training by WUR and CD4D experts in the Netherlands on prioritised two topics(January- March 2018)

In addition to the above mentioned activities and other relevant trainings in the coming years, the following virtual activities have been agreed to be considered in 2018

- Proposal writing and fund raising for establishing a standard plant, soil and water analysis laboratory in the long term at the HI
- A research proposal writing and fund raising to conduct further research on soil and water management practices and link the HI with the universities in the Netherlands





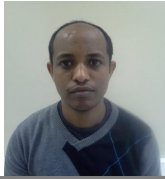








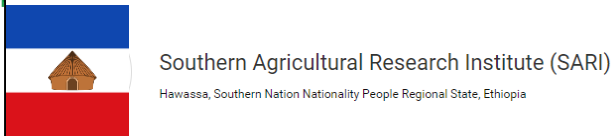
I certify that the above statements are complete and correct to the best of my knowledge.

Date:02/08/2017

Signature: Mesfin and Dawit

Actual assignments: Duration of CD4D participants at HI



| Who? | Where? | How long? |
|---|--|------------------|
|   |  | Three-six months |
|   |    | Two weeks |
|  |  | Three weeks |
|   |   | Two-three weeks |

Actual assignments: activities conducted

- M&E guidelines and reporting format preparation
- Training manual preparation on entrepreneurship and business skills
- Trainings: lectures, exercises, group discussions on various topics



Actual assignments: number of participants



=8



=53

Actual assignments: Impacts and feedback by participants



Improvement in:

- Towards high quality of soil research
- understanding a research call and proposal and report writing
- networking with CD4D experts and universities
- M&E guidelines and reporting formats
- Accessing supportive training manuals and ebooks

'I can now follow the training much better b/c you speak my language'

'I am very much inspired; I've now realized the possibility to go such far in soil science as an Ethiopian'

'I've worked here for many years but never seen such high quality training that solve our real problems'



Main challenges to bring additional and sustainable impacts



- High demand in terms of need for training compared to CD4D expertise and availability
 - Soil science is very much diverse and needs additional specific specialists
 - Limited number of CD4D experts in soil science
 - Less time to travel and stay in the HI for an individual coaching and mentoring
- Shortage of laboratory facilities to demonstrate the basic and state-of-the-art methodologies
 - Funding problems to buy necessary lab facilities
 - In case of budget availability lack of sufficient expertise (what and where to buy)

Ongoing efforts to bring additional and sustainable impacts



- **Prioritize and focus on limited topics**
 - Physical and virtual assignments by CD4D experts
- **Combine the expertise of other Ethiopian and non-Ethiopians**
 - Other native Dutch experts in combination with the diaspora
 - Ethiopian diaspora live in other European countries
- **Looking for additional funding for purchasing lab facilities and research**
 - EHAIA: to submit project proposal for Dutch companies in Ethiopia
 - EIAR: to submit proposal to Flemish government (May 2018)
 - PhD scholarships: one already submitted (from EAIR) and another planned for 2019 (SARI)
 - Exploring tailor made short term trainings funding from NUFFIC
 - IOM role in supporting project visibility is important

Ongoing efforts to bring additional and sustainable impacts



- Networking and exchange visits @WUR
 - Six experts
 - Three institutes (EHAIA, EIAR and SARI)
 - Two weeks training
 - Complements CD4D experts training at HI
 - Important for networking with WUR and other



ISRIC
World Soil Information

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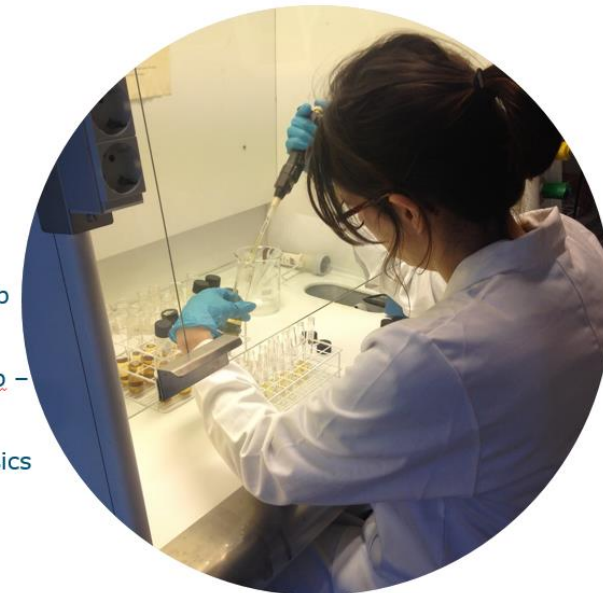
UNIVERSITY IOM-OIM
UNITED NATIONS MIGRATION

11 Dec 2017 — The 'World Soils and their Assessment' course (28 May - 1 June 2018) is now open for registration. It will provide an introduction to the soils of the world and their diversity, their main forming factors, classification (according to the World Reference Base for Soil Resources), and management. The course will include lectures and hands-on exercises; it will make use of the facilities of the World Soil Museum. Additional information is provided [here](#).

Laboratory Skills Course in
Soil Biology and
Biochemistry.

4th-8th June 2018

Wageningen University will be organising a lab skills course. This will include training in soil quality parameters such as labile C, microresp – respiration, extracellular enzyme activity, nematode and enchytraeid extraction and basics of identification. Earthworm sampling and identification.



For further details and to register please contact Rachel Creamer (rachel.creamer@wur.nl). Deadline for registration: 30th March 2018. *Reduced fee of 500 euros and full price registration is 1000 euros.

*The reduced fee applies to BSc and MSc students, PhD candidates, staff of public (national) institutes and organizations based in ODA-listed countries



Acknowledgment

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- IOM Ethiopia (Frehiwot) for facilitating the assignments
- IOM Netherlands (Adri, Rachid, Yussra, Zia) for facilitating the assignments
- Professor Stefaan De Neve (Ghent University) for permission of Mesfin to travel to Ethiopia
- Family members of CD4D experts (who take care of family issues in the absence of some of CD4D experts)

Acknowledgment



Amazing drawings:
gifts to Mesfin and Dawit by
EIAR soil researchers

We are looking forward to contributing to the
end of the CD4D project and beyond!!!

Dank u Wel! / እናመሰግናለን



Samuel and Betelehem to a field work in Ethiopia

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