<u>Curriculum Vitae</u> <u>Dr.Sarra Ah</u>med Mohamed SAAD

- Born on 20/01/1967 in Khartoum-Sudan
- Female
- Sudanese
- Married (Moawia Yahia Babiker, PhD/Soil Science)
- 3 children (*Alkhansaa born on 11.06.1999; Lamies born on 30.04.2004, Mumen born on 25.08.2006*)

Current Position:

Assistant Research Professor/Soil Sciences

Department of Environment & Environmental Pollution (DEEP)

Environment & Natural Resources Research Institute (ENRRI)

National Center for Research (NCR)

Ministry of Science & Technology

Khartoum-Sudan

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Qualifications

May/2002

PhD-Soil Science, Faculty of Agricultural Sciences, Institute of Soil Science, University of Goettingen, Goettingen-Germany.

Thesis title "Processes and Balances of Organic Matter Turnover and Transformation of Mineral Compounds during Decomposition of Biogenic Material in the Presence of Soil Material".

Key words: soil chemistry and organic farming.

The PhD program also included two subjects: Statistics& Econometric and Agroecology

March/1995

MSc. Soil Science, excellent grade, Faculty of Agriculture, University of Khartoum, Khartoum-Sudan.

Thesis title "Characterization of the Grey Layer Soil in the Gezira Area-Southern

Khartoum"

Key words: soil genesis, soil mineralogy and soil chemistry.

February/1991

BSc. Honors Soil Science, second class division one, Faculty of Agriculture, University of Khartoum, Khartoum-Sudan.

Working Experience

May/ 2013-August/ 2013

Research Fellow, Department of Crops Production Systems in the Tropics ,University of Goettingen, Goettingen/Germany. The research project titled (Assessing yield gaps and soil productivity and climate change in Khartoum State-application of mathematical models)...

July/2002- April/2003

Postdoctoral Fellow, Institute of Soil Science, University of Goettingen, Goettingen/Germany

March/2002 up to date

Assistant Research Professor of Soil and Environmental Sciences in the Department of Environmental & Environmental Pollution, ENRRI, National Center for Research, Khartoum-Sudan.

Currently I am supervising the following research projects in the department:

- 1) Climate change and soil productivity in Sudan: challenges and future outlook (2010-2014).
- 2) Recycling of organic waste and organic farming application in Sudan (2012-2014).
- 3) Assessing yield gaps and environmental hazards of major crops in Sudan: wheat and sugarcane. The project is carried out jointly with Crop production systems in the Tropics, University of Goettingen, Goettingebn-Germany (2012-2015)
- 4) Coordination and Teaching in different training workshops for postgraduate students titled:
 - "Technical Aspects of Organic Farming in Sudan"
 - "Applied Techniques of Water and Wastewater Quality Control"
 - "Air Pollution in Sudan"
 - "Environmental Protection"
 - "Waste Management in Sudan"

March/2002-March/2006

Head Department of the Environment and Environmental Pollution, ENRRI, National Center for Research, Khartoum-Sudan.

As Head Department I contributed in the following:

- 1) Establishment of four laboratories: Water laboratory, soil laboratory, Food Safety and Hygiene laboratory and Microbiology laboratory, including all necessary equipments needed for analysis of samples, glass wares, besides providing all methodologies of analyzing the samples.
- 2) Formulation of contracts jointly with some major petroleum companies and other private/governmental sectors offering consultancy, feasibility studies as well as analyzing different environmental samples for detection of pollutants and waste management.
- 3) Training of the research group in the department on analyzing the samples, writing of reports and interpretation of data.
- 4) Assessment, monitoring and follow up of the research projects conducted in the department by different research groups.

1998-2002

Awarded DAAD (German Academic Exchange Service) Scholarship to conduct PhD research project in the Institute of Soil Science, University of Goettingen, Goettingen-Germany

October 1997-March 1998

Joined the German language course in Goethe Institute, Goettingen-Germany sponsored by DAAD.

1995-February/2002

Researcher-Soil science, Environment and Environmental Pollution Department.

I joined the research team in the department under the supervision of the head department in all research activities carried out in the department, including field visit, data collection, soil sampling and conduction of seminars.

1992-1995

Research Assistant-Soil Science, Environment and Environmental Pollution Department.

The activities were as above as Researcher.

Achieved Postgraduate Research Projects I supervised the following research projects:

No	Title	Degree	year	University/City
1	The use of Mathematical models	MSc	2002-2004	Elnilein
	to study soil pollution			University/Khartoum
2	Composting of Sugarcane	Higher Diploma	2003-2004	Sudan
	Bagasse to produce organic			University/Khartoum
	fertilizers			
3	Effect of application of	Higher Diploma	2003-2004	Sudan
	composted Neem seed cortex on			University/Khartoum
	characteristics of sandy soils			
4	The effect of the use of	BSC graduation	2003-2004	Elnilein
	nitrogenous fertilization on soil	project		University/Khartoum
	properties			
5	The study of the effect of	BSC graduation	2003-2004	Elnilein
	salinity on soil quality	project		University/Khartoum
6	Environmental impact	BSC graduation	2003-2004	Elnilein
	assessment of brick production	project		University/Khartoum
_	in Khartoum State		2004 2005	51.11.1
7	Effect of Compost application	BSc graduation	2004-2005	Elnilein
0	on Onion production	project	2004 2005	University/Khartoum
8	Composting of Neem Seed	BSc graduation	2004-2005	Elnilein
	Cake: quality and hazards	project	2005 2007	University/Khartoum
9	The effect of water quality and	MSc	2005-2007	Sudan Academy of
	environmental health condition			Science/Khartoum
	on childern's health in Karrary Area-Omdurman City			
10	Removal of Chromium from	MSc	2005-2007	Sudan Academy of
10	Tannery Wastewater	IVISC	2003-2007	Science/Khartoum
11	Composting of Cotton Residue	MSc	2008-2010	University of
11	to produce organic fertilizer	IVISC	2008-2010	Khartoum/Khartoum
12	Nitrogen mineralization after	MSc	2008-2010	University of
12	application of urea fertilizer to	IVISC	2000 2010	Khartoum/Khartoum
	Okra under tropical conditions			Tana to am, tana to am
13	Assessment of drinking water	BSc graduation	2010-2011	Elnilein
	quality in Khartoum State	project		University/Khartoum
14	The effect of compost application	BSc graduation	2010-2011	Elnilein
	and on some soil characteristics	project		University/Khartoum
15	Assessment of Refinery Waste	MSc	2010-2012	Sudan University
	water on irrigating some tree			/Khartoum
	species in Khartoum State.			
16	The Fate characterization of Total	MSc	2010-2012	University of
	Petroleum Hydrocarbons in			Khartoum/Khartoum
	Shambat Soil, Sudan			,
17	The Rheological Characteristics	PhD	2009-2012	Sudan Academy of
	of Turbid Water during flood			Science/Khartoum

	Season in Sudan			
18	Environmental and Chemical factors affecting soil productivity of some agricultural schemes in Khartoum State	PhD	2010-2013	Omdurman Islamic University/Khartoum
19	Application of Agroforestry models to improve vegetable production in Khartoum Agricultural Schemes	PhD	2013-2016	Sudan Academy of Science/Khartoum
20	Assessment of Industrial waste water application on soil characteristics	MSc	2011-2013	University of Khartoum/Khartoum
21	Effect of compost application in remediating oil polluted soils	MSc	2011-2013	University of Khartoum/Khartoum
22	Effect of Centrifugal separation technique on water quality	MSc	2011-2013	Sudan Academy of Science/Khartoum

Teaching Experience:

I am teaching now the following modules for postgraduate programs in Sudan Academy of Science, Ministry of Science & Technology, leading to MSc. Degree:

- 1) Recycling of Organic wastes module in the program "Waste Management & Engineering"
- 2) Principles of Environmental Pollution module in the program "Integrated Management of Water Resources"
- 3) Organic Farming: Principles and Application for postgraduate and undergraduates students.

Committees

- 1) Since 2003 up to now: External examiner in different universities in Sudan.
- 2) Since 2004 up to now: Member of DAAD pre-selection committee jointly with DAAD representative in Khartoum and German Embassy–Khartoum.
- 3) Member of "organic fertilizers production and use in Khartoum committee", jointly with Ministry of Agriculture, Khartoum-Sudan.

Prizes and Awards

- 1) February 2010: The best supervisor prize for MSc research project, from Sudan Academy of Science, Ministry of Science and Technology.
- 2) In September 2011 awarded Patent (No.1900) from Sudan for making an organic mature fertilizer called (organic animal fertilizer) using Earth Compostation approach.

Languages Proficiency

- Arabic (mother language)
- English (fluent)
- German (fluent)
- French (fair)
- Spanish (fair)

Computer Skills

- Use of Microsoft Office and data analysis using different software.

Memberships

I am a member in the following societies:

- 1) Sudanese Environment Conservation Society (Sudan).
- 2) German Society of Soil Science (Germany).
- 3) German Agricultural Society (Germany).
- 4) DAAD Alumni-Sudan

Some Attended Training Courses

- 1) French Language Course", 1987-1989, University of Khartoum-Sudan
- 2) "Participatory Rapid Appraisal on Project Life Cycle", 12-23/May 1996, Khartoum-Sudan
- 3) "Environmental Education Training Course", 14-20/8/1996, Khartoum-Sudan
- 4) "German Language Course", 1/10/1997-28/3/1998, Goettingen-Germany.
- 5) "SAS Basic and Application", 16-18/5/2000, Goettingen-Germany.
- 6) "Excel for beginners", 5-6/9/2000, Goettingen-Germany.
- 7) "Spanish Language Course", 19/9-19/10/2000, Goettingen-Germany
- 8) "Environmental Statistics", 2-4/10/2010. Khartoum-Sudan

Publications

- 1) Alhaj,M.; Saad,S.A.M.; Hiriaka,A.; & Agabna,A. (1993). "Characterization of Al/Rawakeeb Soil-Western Omdurman." Scientific Annual Report, No.(1), ENRRI Publications, National Center for
- 2) **Saad,S.A.M**. (1994). "Quality of some Fodder Crops grown in different soil types". Scientific Annual Report, No.(2), ENRRI Publications, National Center for Research, Khartoum-Sudan.
- 3) **Saad,S.A.M.** et.al (1995). "Effect of Soil Characterization on Ground Water Quality in Khartoum State". Scientific Annual Report, No.(3), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 4) **Saad,S.A.M.**; Babiker,M.Y.; (1998). "Composting of Household Wastes in Khartoum State". Scientific Annual Report, No. (6), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 5) Abdelmagid, A., Saad, S.A.M. (2000). "Characterization of the grey Layer in the Gezira Soil". Journal of Agricultural Sciences, faculty of Agriculture, University of Khartoum, Vol.(2), No.(3).
- 6) **Saad,S.A.M.** & Omer,S. (2002). "The study of the Effect of Industrial wastes on some soil Chemical and Physical Properties" Scientific Annual Report, No.(10), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 7) Saad, S.A.M & Mohamed, A. (2002). "The Environmental Impact of Pesticide Use on Sudanese Soils". Scientific Annual Report, No.(10), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 8) Saad, S.A.M (2003). "Carbon Mineralization during Decomposition of Wastes". Scientific Annual Report, No.(11), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 9) Saad, S.A.M.; Salih, R. & Ali, S. (2003). "Recycling of Organic Wastes to Produce Organic Fertilizers" Scientific Annual Report, No.(11), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 10) **Saad,S.A.M.** & Abuharaz,A.(2004). "The Environmental and Economical Impact Assessment of Traditional Brick Production in Khartoum". Scientific Annual Report, No.(12), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 11)Saad,S.A.M; AbdelAal,S. Alnour W. (2004) "Evaluation of Organic Fertilizers Use in Agriculture: Bagasse and Residue of Neem Seed Cortex Fertilizers". Scientific Annual Report, No.(12), ENRRI Publications, National Center for Research, Khartoum-Sudan

- 12) Saad,S.A.M et al.(2005)."The Study of Chicken Manure Use on Some Soil Properties in Al/Seelait Area" Scientific Annual Report, No.(13), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 13) Abdella,A; & Saad,S,A.M.(2006) "Composting of Cotton Straw and Application in Agriculture" Scientific Annual Report, No.(14), ENRRI Publications, National Center for Research, Khartoum-SudanResearch, Khartoum-Sudan.
- 14) Salih, N. & Saad, S.A.M. (2006). "The Effect of Water Quality and Environmental Housing Conditions on Childern's Health in Omdurman City". Scientific Annual Report, No. (14), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 15) **Saad,S.A.M** & Meyer B.(2006)."Turnover of Organic Matter and Mineral Transformation during Decomposition of Organic Wastes with and without Soil Material" GWDG, University of Goettingen online Publications, Goettingen-Germany
- 16) Abelrazig, S.; Saad, S.A.M & Aldouma, A. (2007). "The Change in Soil Characteristics due to the use of Refinery Discharged Wastewater Scientific Annual Report, No.(15), ENRRI Publications, National Center for Research, Khartoum-Sudan
- 17) **Saad,S.A.M**.& Balla,A.(2008). "The effect of compost in cadium adsorption in tropical soils" . Scientific Annual Report, No.(16), ENRRI Publications, National Center for Research, Khartoum-Sudan.
- 18) **Saad,S.A.M et.al** (2009). "Potassium recovery and fixation of potassium in soil amended with organic and inorganic fertilizers. AlBuhuth J. No.56, 45-50,Khartoum-Sudan
- 19) **Saad,S.A.M**. et.al (2010). 'Availability of some Plant Nutrients to crops from different sources of fertilizers" .Scientific Annual Report, No.(17), ENRRI Publications, National Center for Research, Khartoum-Sudan.
- 20) Abdella M.E.; Saad,S.A.M,' Ibrahiem,S.I.; (2011). "Utility & Nutritive Values of Organic & Inorganic Fertlization on Teff Grass Growth and some Soil Chemical Properties". International Journal of Sudan Research, Vol.2 No.1.
- 21) Mahmoud,S.S.; Abdel-Magid,I.S.; **Saad,S.A.M**. (2011)."Rheological Modeling for Turbid River Water". Sudan Engineering Society Journal. March 2012, Volume 58;No.1
- 22) Nuhad M. Ali Eltayeb, **Sarra A. M. Saad**, Elamin A. Elamin, Rayan M. A. Madani (2012). "Biodegradation of Total Petroleum Hydrocarbons in Shambat Soil, Sudan" International Journal of Sudan Research (IJSR)Volume 2 Number 2
- 23) **Sarra A.M.Saad**, Moawia Y.Babiker, Anthony Whitbread (2012). "Challenges of maintaining soil productivity in Sudan", Tropentag, Goettingen, Germany
- 24) **Sarra A.M Saad** (2012) "Management of Soil Productivity in Sudan" R & D Symposium, National Center for Research Khartoum/Sudan
- 25) **Sarra A.M Saad** (2012) "Intellectual Property & Scientific Research in Sudan , TOTKEN & National Center for Research, Khartoum/Sudan
- 26) **Sarra Ahmed Mohamed Saad** (2013)." Application and assessment of Earth Compostation Approach during composting of Household wastes" .International Journal of Sudan Research, Vol 3, No.1.
- 27) **Sarra Ahmed Mohamed Saad** & Abutalib Balla Gumma Mohammed.(2014)."Assessment of the Role of Compost in Remediation of Cd-contaminated Soils". IJIKMMENA, Vol3; No 1.
- 28) Nuhad Mirgani, **Sarra A.M.Saad**, Elamin Abdemajid(2014). "Mobilty of total petroleum hydrocarbons in Shamabt soil". World Journal of Science, Technology and Sustainable Development Vol 2, issue 2.

Referees

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