THESIS AND PUBLICATIONS

(i) Project, Thesis and Dissertation (3)

(a) Ekwue, E.I. 1981. Construction and calibration of trapezoidal flumes for measurement of water in irrigation channels and furrows*. B.Sc. Project, University of Nigeria, Nsukka Library.*

(b) Ekwue, E.I. 1984. Experimental investigation on the effect of preparation of soil samples on measured values of soil erodibility. *M Sc. Thesis, Silsoe College, Cranfield University, England Library.*

(d) **Ekwue, E.I. 1987.** The influence of organic matter on the erodibility of non-cohesive soils. *Ph. D Dissertation, Silsoe College, Cranfield University, UK Library.*

(ii) PUBLICATIONS

(a) Chapter in Books

1. **Ekwue, E.I. 1990**. Estimation of irrigation water requirement of wheat in Borno state. In: **WHEAT IN NIGERIA**: *Production, Processing and Utilization, Eds. A.J. Rayer et al., LCRI/IAR/UNIMAID, Chapter 23, 165 - 171.*

(b) Articles Published or to be Published in Refereed Journals made up of International, Regional and National Articles

2. **Ekwue, E.I. 1989.** Effects of aggregate size and duration of rainfall on surface strength of soils differing in organic matter contents*.* ***Journal of Arid Agriculture (Nigeria)*** *2 (1): 72 - 83.*

3. Ekwue, E.I. & J.O. Ohu **1989.** The effect of soil sample preparation methods on soil erodibility. ***Journal of Arid Agriculture (Nigeria)*** *2 (1): 84 - 93.*

4. **Ekwue, E.I. 1990.** Effect of organic matter on splash detachment and the processes involved. ***Earth Surface Processes and Landforms (UK)*** *15 (2): 175 - 181.*

5. **Ekwue, E.I. 1990.** Organic matter effect on soil strength properties. ***Soil & Tillage Research (Netherlands)*** *16 (3): 289- 297.*

6. **Ekwue, E.I.** & H.D. Aliyu **1990.** Survey of soil erosion features in Borno State: A detailed study of former Biu L.G.A. ***Annals of Borno (Nigeria****) 6/7: 221 - 230.*

7. Ekwue, E.I. & J.O. Ohu **1990.** A model equation to describe soil detachment by rainfall. ***Soil & Tillage Research (Netherlands)*** *16 (3) 299 - 306.*

8. **Ekwue, E.I. 1991.** The effect of peat content, rainfall duration and aggregate size on soil crust strength. ***Earth Surface Processes and Landforms (UK)*** *16 (6): 485 - 498.*

9. **Ekwue, E.I. 1991.** The effect of soil organic matter content, rainfall duration and aggregate size on soil detachment. ***Soil Technology (Germany)*** *4 (3): 197 - 207.*

10. **Ekwue, E.I. 1992.** Effect of organic and fertilizer treatments on soil physical properties and erodibility. ***Soil & Tillage Research (Netherlands)*** *22 (3- 4): 199 - 209.*

11. Ekwue, E.I. 1992. Quantification of the effect of peat on soil detachment by rainfall. ***Soil & Tillage Research (Netherlands)*** *23 (1- 2): 141 - 151*.

12. Ekwue, E.I. & Y.I. Tashiwa **1992.** Survey of gully erosion features in Mubi L.G.A. of Adamawa State. ***Annals of Borno (Nigeria)*** *7/8: 181 - 191*.

13. **Ekwue, E.I.,** J.O. Ohu & I.W. Wakawa **1993.** Effects of incorporating two organic materials at varying levels on splash detachment of some soils. ***Earth Surface Processes and Landforms (UK)*** *18 (5), 399 - 406.*

14. Stone, R.J. & **E.I. Ekwue 1993.** Maximum bulk density achieved during soil compaction as affected by the incorporation of three organic materials. ***Transactions of the American Society of Agricultural Engineers*** *36 (6): 1713 - 1719.*

15. Ekwue, E.I., Ajisegiri, E.S.A**.** & Ohu J.O. **1993.** Construction and calibration of Morin-type rainfall simulator. **Ife Journal of Technology (Nigeria),** 3, 29-34.

16. Ohu, J.O., O.A. Folorunso & **E.I. Ekwue 1993.** Vehicular traffic effect on physical properties of sandy loam soil profiles in a semi-arid region of Nigeria. ***Soil & Tillage Research (Netherlands)*** *28 (1), 27 - 35.*

17. **Ekwue, E.I. 1994.** A simple technique for measuring infiltration rates during simulated rainfall. ***Journal of Arid Agriculture (Nigeria)*** *3-7: 95-104*

18. **Ekwue, E.I.** & R.J. Stone **1994.** Effect of peat on the compactibility of some Trinidadian soils. ***Journal of Agricultural Engineering Research (UK)*** *57 (2): 129 - 136.*

19. Ohu, J.O., **E.I. Ekwue** & I.S. Atiwurcha **1994.** A portable rainfall simulator for soil erosion research*.* ***Journal of Arid Agriculture (Nigeria)*** *3-7: 105 - 112.*

20. Ohu, J.O., **E.I. Ekwue** & O.A. Folorunso **1994.** The effect of addition of organic matter on the compaction of a vertisol from Northern Nigeria. ***Soil Technology (Netherlands)*** *7(2): 155 - 162.*

21. Ohu, J.O., **E.I. Ekwue** & Ndrimbita, J.B. **1994.** An air permeability for agricultural research**.** ***Ife Journal of Technology (Nigeria)*** *4, 15 – 22.*

22. Ekwue, E.I. & R.J. Stone **1995.** Organic matter effects on the strength properties of compacted agricultural soils. ***Transactions of the American Society of Agricultural Engineers*** *38 (2): 357 - 365.*

23. **Ekwue, E.I.** & R.J. Stone **1995.** Irrigation scheduling for sweet maize relative to soil compaction conditions. ***Journal of Agricultural Engineering Research (UK),*** *62 (2): 85 - 94.*

24. Stone, R.J. & **E.I. Ekwue 1995.** Compressibility of some Trinidadian soils as affected by the incorporation of peat. ***Journal of Agricultural Engineering Research (UK)*** *60 (1): 15 - 24.*

25. Stone, R.J. & **E.I. Ekwue 1996.** Soil compressibility as affected by the sewage sludge incorporation. ***Journal of Agricultural Engineering Research (UK),*** *64 (3): 227 - 236.*

26. Ekwue, E.I., R. J. Stone & R. Smith **1997.** Statistical analysis of Caribbean rainfall data: Formulating linear models relating dependable rainfall to mean monthly rainfall. **The *West Indian Journal of Engineering (Trinidad)*** *19 (2): 49 - 58.*
http://sta.uwi.edu/eng/wije/vol1902_jan1997/documents/CaribbeanRainfallData.pdf

27. **Ekwue, E.I.** & R.J. Stone **1997.** Density-moisture relations of some Trinidadian soils incorporated with sewage sludge. ***Transactions of the American Society of Agricultural Engineers*** *40: 317 - 323.*

28. Stone, R.J., **E.I. Ekwue** & R. Clarke **1998.** Engineering properties of sewage sludge in Trinidad. ***Journal of Agricultural Engineering Research (UK)*** *70 (2): 221 - 230.*

29. Simon, C.M., **E.I. Ekwue,** F.A. Gumbs & C.V. Narayan **1998.** Evapotranspiration and crop coefficients of irrigated maize in Trinidad. ***Tropical Agriculture (Trinidad):*** *75 (3): 342 - 347.*

30. **Ekwue, E.*I.*** *& R.V. Rigg* ***2001.*** Computer-aided irrigation scheduling – a case study: St. Mary Banana Estates, Jamaica*.* ***The West Indian Journal of Engineering (Trinidad):*** *23 (2): 1 – 8.*

http://sta.uwi.edu/eng/wije/vol2302_jan2001/documents/ComputerAidedIrrigationScheduling.pdf

31. **E*kwue, E.I.,*** *R.J. Stone & S. Ramphalie* ***2002.*** Engineering properties of wetland soils in Trinidad. ***Applied Engineering in Agriculture, American Society of Agricultural Engineers,*** *18 (1): 37 – 45.*

32. **Ekwue, E.I.,** M. Gray & A. Brown **2003.** Poultry farm buildings in Trinidad: Present and future prospects. ***The West Indian Journal of Engineering (Trinidad****) 25 (2): 1 – 17.*

http://sta.uwi.edu/eng/wije/vol2502_jan2003/documents/PoultryFarmBuildingsinTrinidad.pdf 22

33. **Ekwue, E.I.** & R.J. Stone **2004.** Effect of pan diameter on evaporation and evapotranspiration. ***Transactions of the American Society of Agricultural Engineers*** *47 (2): 485 – 488.*

34. **Ekwue, E.I.,** & R.J. Ramdeen **2004.** Preliminary feasibility of a sand-clay filter for treating surface and industrial wastewaters in Trinidad. ***The West Indian Journal of Engineering, Trinidad*** *27 (1): 50 - 56.*

http://sta.uwi.edu/eng/wije/vol2701_jul2004/documents/Sand-Clayfiltersforwastewater.pdf

35. **Ekwue, E.I.,** R.J. Stone, V.V. Maharaj & D. Bhagwat **2005.** Thermal conductivity and diffusivity of four Trinidadian soils as affected by peat content. ***Transactions of the American Society of Agricultural Engineers,*** *48 (5): 1803 – 1815.*

36. **Ekwue, E.I.,** D.Z. Lall & R.J. Stone **2006.** Engineering properties of major soils used in cricket pitches in Trinidad. ***The West Indian Journal of Engineering (Trinidad***), *28 (2): 27 – 40.*

http://sta.uwi.edu/eng/wije/vol2802_jan2006/documents/CricketPitchesinTrinidad.pdf

37. **Ekwue, E.I.,** R.J. Stone, & D. Bhagwat **2006.** Thermal conductivity of some compacted Trinidadian soils as affected by peat content. ***Biosystems Engineering, UK,*** *94 (3): 461 –469.*

38. Wuddivira, M.N., R.J. Stone, R.J. & **Ekwue, E.I. 2006.** Soil texture, mineralogy and organic matter effects on structural stability and soil loss of selected Trinidad soils after rainfall. **Tropical Agriculture (Trinidad), 83**: 69-78.

39. Eccles, C. & **E.I. Ekwue 2008.** A Mechanical shaker for sieving dry soil samples. **West Indian Journal of Engineering (Trinidad),** 30 (2): 12 – 21.http://sta.uwi.edu/eng/wije/vol3002_jan2008/documents/SievingSoilSamples.pdf

40. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue 2008.** A Simple Mathematical Model for Slaking Sensitivity Assessment in Trinidadian Soils under Intense Rainfall. e-Journal of the Caribbean Academy of Sciences, 3 (7): 169-174. http://ojs.mona.uwi.edu/index.php/cas/issue/view/17

41. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue 2009.** Clay, organic matter and wetting effects on splash detachment and aggregate breakdown under intense rainfall. **Soil Science Society of America Journal**, 73 (1): 226 - 232. https://www.agronomy.org/publications/sssaj/articles/73/1/226

42. Ekwue, E.I., C. Bharat and K. Samaroo **2009**. The effect of soil type, peat and farmyard manure addition, slope and their interactions on wash erosion by overland flow of Trinidadian soils. **Biosystems Engineering, UK,** 102, 236 – 243.

43. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue 2009**. Structural stability of humid tropical soils as influenced by manure incorporation and incubation duration. **Soil Science Society of America,** 73 (4): 1353 – 1360. https://www.soils.org/publications/sssaj/articles/73/4/1353

44. Wuddivira, M.N**., Ekwue, E.I.** and Stone, R.J. **2009.** Mechanisms of stability and erodibility of humid tropical soils under intense rainfall. **Geophysical Research Abstracts**, Vol. 11, EGU2009-0.

45. Ekwue, E.I. and Harrilal, A**. 2010.** Effect of soil type, peat, slope, compaction effort and their interactions on infiltration, runoff and raindrop erosion of some Trinidadian soils. **Biosystems Engineering, UK**, 105, 112 – 118.

46. Wuddivira, M.N**., Ekwue, E.I.** and Stone, R.J. **2010.** Modelling slaking sensitivity to assess degradation potential of humid tropic soils under intense rainfall. **Land Degradation and Development Journal, UK**, 21: 61-73.

47. Adeyanju, A.A**., Ekwue, E.I.** & Compton, W. **2010.** Experimental and theoretical analysis of a beverage chiller. **Research Journal of Applied Sciences 5 (3): 195 – 203.** http://docsdrive.com/pdfs/medwelljournals/rjasci/2010/195-203.pdf

48. Ekwue, E.I. 2010. Management of water demand in the Caribbean region: Current practices and future needs. ***West Indian Journal of Engineering 32, Nos. 1/2, 28 – 35.*** http://sta.uwi.edu/eng/wije/vol3201-02_jan2010/documents/WaterDemand.pdf

49. Ekwue, E.I. and Bartholomew, J. **2011.** Electrical conductivity of some soils in Trinidad as affected by density, water and peat content. **Biosystems Engineering**, **UK**, 108, 95 – 103.

50. **Ekwue, E.I., R**. Birch and S. Bethel **2011.** *Effect of Soiltac on wash erosion by overland flow of some Trinidadian soils.* **Biosystems Engineering**, **UK**, 108, 87 – 94.

51. *Birch, R.A., Narine, K. and* ***Ekwue, E.I. 2011.*** *Evaluation of the performance of a biological filter with and without a cleaning mechanism.* ***The Journal of the Association of Professional Engineers of Trinidad and Tobago 40 (1), 44-49.*** http://www.apett.org/home/images/journal/japett_vol40_no1_may2011.pdf

52. Ekwue, E. I. and S. Seepersad-Singh **2011.** A mechanical auger pulverizer for crushing soil samples. **The Journal of the Association of Professional Engineers of Trinidad and Tobago 40 (2): 18 – 25.**

http://www.apett.org/home/images/stories/pdf/vol40_n2/japett-v40n2-p18-25eekwue-nov1128.pdf

53. Ekwue, E.I., R.J. Stone, & D. Bhagwat **2011.** Thermal conductivities of some common soils in Trinidad. **West Indian Journal of Engineering 33 (1/2): 4 – 11. http://sta.uwi.edu/eng/wije/vol3301-02_jan2011/documents/ThermalConductivitiesofSoils.pdf**

54. Ekwue, E.I. and Samaroo, K. **2011.** A new laboratory equipment for assessing soil erosion by water. **West Indian Journal of Engineering 33 (1/2): 43 – 49.**

http://sta.uwi.edu/eng/wije/vol3301-02_jan2011/documents/AssessingSoilErosion.pdf

55. Wuddivira, M.N**., Ekwue, E.I.** and Stone, R.J. **2011.** Predicting the stability and erodibility of humid tropical soils under intense rainfall. **Geophysical Research Abstracts**, Vol. 13, EGU2011-12554, 2011 EGU General Assembly 2011.

56. E. Ali, **E.I. Ekwue**, J. Bridge, R. Birch **(2013).** A three-stack mechanical sieve shaker for determining aggregate size distribution of soils. **West Indian Journal of Engineering**, 35 (2): 36- 44.

https://sta.uwi.edu/eng/wije/vol3502_jan2013/documents/AThree-StackMechanicalSieveShakerforDeterminingAggregate.pdf

57. Ekwue, E.I., V. Dhanraj and R. Birch (**2013**). A simple portable potable water treatment plant in rural areas. **The Journal of the Association of Professional Engineers of Trinidad and Tobago 41 (1): 29 – 34.**

http://www.apett.org/home/images/journal/vol41n1/japett_v41n1p.29-34.pdf

58. Wuddivira, M.N**.,** Stone, R.J. and **Ekwue, E.I. (2013).** Influence of cohesive and disruptive forces on strength and erodibility of tropical soils. **Soil and Tillage Research, Netherlands 133: 40 – 48.**

59. Warrick, J. and **E.I. Ekwue (2014).** Preliminary feasibility of large-scale treated wastewater re-use for agriculture in Trinidad and Tobago. **West Indian Journal of Engineering, 36 (2):** 20 – 28.

https://sta.uwi.edu/eng/wije/vol3602_jan2014/documents/Manv36n2EEkwue-Jan2014.pdf

60. Ekwue, E.I., R. Birch, N.R. Chadee **(2014).** A comparison of four Instruments for measuring the effects of organic matter on the strength of compacted agricultural soils. **Biosystems Engineering**, UK**, 127: 176 – 188.**

61. Ekwue, E.I., Constantine, R C and Birch, R. **(2015).** Simulation of irrigation water requirements of some crops in Trinidad using the CROPWAT irrigation software. **West Indian Journal of Engineering, 37 (2): 31 – 36.**

https://sta.uwi.edu/eng/wije/vol3702_jan2015/documents/Vol37No2ManEEKwueJan2015.pdf

62. Ekwue, E.I., R. Birch, J. Chewitt (**2015).** Effect of dynamic and static methods of compaction on soil strength. **West Indian Journal of Engineering, 37 (2): 74 – 78.**
https://sta.uwi.edu/eng/wije/vol3702_jan2015/documents/Vol37No2ManEIEkwueJan2015.pdf

63. Ekwue, E.I. and Seepersad, D. **(2015).** Effect of Soil type, peat, compaction effort and their interactions on soil strength and splash detachment rates during simulated rainfall. **Biosystems Engineering, UK**, **136: 140 – 148.**

64. Ekwue, E.I., Stone, R.J., Peters, E. and Rampersad, S.A. **(2015).** Thermal conductivities of some agricultural soils in Trinidad as affected by density, water and peat content. **West Indian Journal of Engineering, 38 (1): 61 – 69.**

https://sta.uwi.edu/eng/wije/vol3801_jul2015/documents/M07_v38n1p61-69EIEkwue-Jul2015.pdf

65. Deoraj, S., **Ekwue, E.I.** and Birch, R **(2015).** An evaporative cooler for the storage of fresh fruits and vegetables. **West Indian Journal of Engineering, 38 (1): 86 – 95.**

https://sta.uwi.edu/eng/wije/documents/WIJE_v38n1_Jul2015Completed.pdf

66. Birch, R.A., **Ekwue, E.I.** and Phillips, C. J. **(2016).** Soil-metal sliding resistance forces in some soils with high water contents. **West Indian Journal of Engineering, 38 (2): 52-58.**

https://sta.uwi.edu/eng/wije/vol3802_jan2016/documents/Vol38No2RABirchJan2016.pdf 25

67. Sahadeo, S., **Ekwue, E.I.** and Birch, R.A. **(2017).** Survey and modeling of protected agriculture environment systems in Trinidad and Tobago. **West Indian Journal of Engineering, 39 (2): 46 - 57.**

https://sta.uwi.edu/eng/wije/vol3902_jan2017/documents/Abs06_16022_v39n2p4657SSahadeoJan1630doc.pdf

68. Ekwue, E.I., Ramsumair, A. and Robert Birch, R. **(2017).** Effects of water content and compaction on ball movement on major cricket pitch soils in Trinidad. **West Indian Journal of Engineering, 39 (2): 83 - 89.**

https://sta.uwi.edu/eng/wije/vol3902_jan2017/documents/M10_16026_v39n2p8389EEkwueJan1730doc.pdf

69. Suraj, M.; Ekwue, E.I. and Birch, R. **(2018).** A controlled environment agriculture greenhouse for the Caribbean region. **West Indian Journal of Engineering, 40 (2): 10 – 16.**

https://sta.uwi.edu/eng/wije/vol4002_jan2018/documents/M0218005v40n2p1016MSurajJan1801.pdf

70. Ekwue, E.I.; Dookhoo, A.T.; and Chakansingh, A. **(2018).** A wet sieving apparatus for determining aggregate stability of soils. **The Journal of the Association of Professional Engineers of Trinidad and Tobago, 46 (1): 35 -40.**

71. Arjoon, M.A., **E. I. Ekwue,** Gittens, N. and R. Birch (**2018**). A channel to demonstrate the effect of width, slope and bed roughness on water flow. **The Journal of the Association of Professional Engineers of Trinidad and Tobago, 46 (2).**

72. Leonard, Lynessa; **E.I. Ekwue**; A. Taylor and R. Birch (**2018**). Evaluation of a machine to determine maximum bulk density of soils using the vibratory method. **Biosystems Engineering**, UK **(Paper under review).**

(e) Papers Presented at Conferences and Seminars

73. **Ekwue, E.I. 1986.** The influence of organic matter on soil erodibility. 8th. Post-graduate symposium of the *British Geomorphological Research Group, Leicester University, U.K. (22 pages)*

74. Haque, M.A., **E.I. Ekwue** & B.J. John **1991.** Evaluation of field efficiencies of seed planting equipment in Borno State, Nigeria. *15th. NSAE Conference (16 pages).*

75. Ohu, J.O., U.I. Ahmed & **E.I. Ekwue 1991.** The influence of groundnut haulms on the compactibility and hydraulic properties of some agricultural soils in Borno State, Nigeria. *15th. NSAE Conference (13 pages).*

76. Ohu, J.O., A.A. Ugherughe & **E.I. Ekwue 1991.** The use of soil mechanical properties in predicting agricultural productivity of some soils in semi-arid region of Nigeria. *15th. NSAE Conference (20 pages).*

77. Ohu, J.O., O.A. Folorunso & **E.I. Ekwue 1991.** The influence of tractor traffic on crop productivity in a semi-arid region of Nigeria. *Proceedings, 12th. International Conference of Soil and Tillage Organization, IITA, Ibadan, Nigeria, 238 - 245.*

78. **Ekwue, E.I. 1992.** Soil conservation technologies: suggested options for the Caribbean Region. *Proceedings, 6th. Annual Technical Conference of Association of Professional Engineers of Trinidad and Tobago (APETT), 71 - 78.*

79. **Ekwue, E.I. 1992.** The role of organic amendments in reducing machinery cultivation problems and erodibility of Caribbean soils. *Proceedings of the 6th. Annual Technical Conference of the Association of Professional Engineers of Trinidad and Tobago (APETT), 138 - 148.*

80. Ekwue, E.I. & R.J. Stone (1996). Influence of organic materials on compaction of Trinidadian soils. In C.E. Clapp et. al. (Eds.), *Proceedings, 7th. International Conference of the International Humic Substances Society 57: 481 - 493.*

81. **Ekwue, E.I. (1998).** Environmental implications of cropping on hillsides: A Caribbean perspective: an Invited Paper Presented to a Workshop entitled ***"Towards Improved Hillside Tree Crops Management in Trinidad and Tobago*** *held at UWI from January 8 to 9, 1998.*

82. **Ekwue, E.I. (1999).** The effect of rice cultivation on the surface hydrology of Nariva Swamp in East Trinidad. *6th Annual Research Symposium, Institute of Marine Affairs, Chaguaramas, Trinidad, July 1999 (20 pages).*

83. Ekwue, E.I., R.J. Stone & D. Duggal (1999). Agricultural water management in the Caribbean region: Issues and Prospects. Technical Centre for Agricultural and Rural Co-operation (CTA) International Seminar, Cordoba, Spain, September 20 - 25, 1999 (28 pages).

84. Ekwue, E.I. (2002). Proposed physical improvements and developments at the Nariva ecotourism sites. Invited Paper Presented to a Workshop titled "Integrated Conservation Management of Nariva Swamp" held at Hotel Carrie's On the Bay, Manzanilla , Trinidad from March 14 to 15, 2002 (10 pages).

85. Ekwue, E.I. (2004). Computer models for irrigation systems design: an overview of the use of irrigation scheduling software. Special Valedictory Conference, Department of Agricultural and Bioresources Engineering, University of Nigeria, Nsukka, October 29 (9 pages).

86. Ekwue, E.I. (2004). Water use and management in the Caribbean region: An overview. Special Valedictory Conference, Department of Agricultural and Bioresources Engineering, University of Nigeria, Nsukka, October 29 (7 pages).

87. Ekwue, E.I. **(2005).** Evapotranspiration, crop water requirements and sprinkler irrigation design. Paper presented at an Advanced Workshop in Agricultural Water Management organized by the Brace Centre for Water Resources Management, McGill University and the Faculty of Engineering, The UWI, October 3-7, 2005.

88. Ekwue, E.I. (2005). Use of electronic teaching with WebCT at the University of the West Indies. *Paper presented at the* Training of Facilitators in e-Learning in Water Management Workshop conducted jointly by the Capacity Building Network for Integrated Water Resource Management (CapNet/UNDP) and the Partnership for Water Education and Research (PoWER/UNESCO) at the Parahyangan Catholic University, Bandung, Indonesia from **November 21 to 25** (9 pages).

89. Ekwue, E.I. & Bachan, D. **(2006).** A machine for testing soil compaction by vibratory method. Proceedings of the Industrial Engineering and Management Conference on Building Engineering and Management Competence (IEM- 2006), from **June 1 to 2**, UWI, St. Augustine, pages 282 – 288.

90. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2006).** Soil texture and organic matter on structural stability, infiltration, runoff and seal formation. In D. Himmel (Ed.), *Caribbean Academy of Sciences:*

Science and Technology in a Caribbean Environment (pp. 134-135). Guadeloupe, France: Caribbean Academy of Sciences. http://sites.google.com/a/caswi.org/www/CAS2006-Ag_Plant.pdf

91. Wuddivira, M.N., Gouveia, G., Stone, R.J. & **E.I. Ekwue (2006).** Clay and organic matter effects on splash detachment. Abstract to the 42nd Annual Caribbean Food Crops Society Meeting, St. Juan, Puerto Rico, July 9 – 14.

92. Ekwue, E.I. **(2008).** Climatic Change and Water Resources in the Caribbean Region. Paper presented to the Training of Trainers course on Integrated Water Resources Management for Adaptation to Climate Change in Panama City from August 4-8, 2008.

93. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2008).** Erodibility of humid tropic soils as affected by clay, organic matter and wetting. Abstract in Division S06-Soil & Water Management & Conservation, 2008 Joint Annual Meeting of GSA, SSSA, CSSA, ASA, GCAGS and HGS held in Houston from October 5-9, 2008.

94. Mwasha, A. and **E.I. Ekwue (2010).** The effect of crust strength and thickness on the stability of reinforced embankment constructed on soft soil. Geosynthetics For Africa First African Regional Conference on Geosynthetics, held by International Geosynthetics Society at Cape Town, South Africa, 2- 5 September, 2009.

95. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2010).** Texture, organic matter and wetting controls on shear strength and erodibility of humid tropical soils. In Climate Change "Implications for Caribbean Health, Agriculture, Ecology, Industries and Building Codes. 17th General Meeting and Biennial Conference of the Caribbean Academy of Sciences, November, 2010, Antigua and Barbuda, West Indies.

96. Birch, R; **Ekwue, E.I**. and Bridge, J. **(2012).** Factors affecting the energy utilization during tillage operations in soils of varying organic matter content. Proceedings of 12th. Pan American Congress of Applied Mechanics, Trinidad, West Indies, January 2 – 6.

97. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2013).** Soil crusting under intense rainfall as influenced by cohesive and wetting factors. ASA, CSSA and SSSA International Annual Meetings, Nov. 3 – 6, 292-1, Tampa, Florida.

98. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2013).** Soil mechanical resistance to penetration as influenced by cohesive and disruptive forces. Proceedings of the Caribbean Food Crops Society, 49, 516.

99. Ekwue, E.I. (2014). Simulation of irrigation – watering fields using CROPWAT. Caribbean Academy of Sciences Workshop, June 2, at UWI.

100. Deoraj, S., **E. I. Ekwue** and R. Birch **(2015).** An evaporative cooler for the storage of fresh fruits and vegetables. Annual Technical Conference of the Association of Professional Engineers of Trinidad and Tobago, June 25 – 26, Point Lisas, Couva.

101. Seepaul, S., R.A. Birch and **E.I. Ekwue (2015).** The design and field testing of a low priced cassava harvester for Trinidad soils. American Society of Agricultural Engineering (ASABE) Paper No. 152190903, St. Joseph, Michigan.

102. Wuddivira, M.N., R.J. Stone and **E.I. Ekwue (2015).** Assessing the degradation potentials of tropical soils under intense rainfall. Conference on Desertification and Land Degradation, 16 – 17, Ghent, Belgium.

(f) Other Papers - Technical Reports

103. **Ekwue, E.I.,** E.S. Ajisegiri and J.O. Ohu **1991.** Construction of a Morin- Type Rainfall Simulator. *Department of Agricultural Engineering Research Report submitted to the University of Maiduguri, Nigeria Research Committee.*

104. **Ekwue, E.I. 1995.** Report on Computer Hydraulic Modeling of Judher and Temple Distributaries, Pat Feeder Canal Rehabilitation and Improvement Project, Pakistan. *Report produced as part of a four-month attachment to Sir William & Partners Ltd. Swindon, England.*

105. **Ekwue, E.I. (1999).** Hydrology, Soils, Machinery and Roads in the Nariva Swamp. In: Reports on Environmental Impact Assessment of the Nariva Swamp (Biche Bois Neuf Area) and the Management Plan for the Nariva Swamp. *Report was submitted to the Minister of Agriculture, Marine and Land Resources by the Institute of Marine Affairs, Chaguaramas, Trinidad.*

106. **Ekwue, E.I. (2006).** A Teaching Dossier. The University of the West Indies, St. Augustine, Trinidad and Tobago, July 2006. *Prepared towards the application of the Prestigious UWI/Guardian Life of the Caribbean Premium Teaching Award in September 2006.*
http://www.facebook.com/video/video.php?v=452832037291

107. **Ekwue, E.I. (2008).** Study of the Potentials of e-Learning as a Training Mode in Integrated Water Resources Management in the Anglophone Caribbean. *Report was submitted to Caribbean WaterNet in March.*

108. **Ekwue, E.I. (2009).** Convergence of Engineering, Agriculture and the Environment. Professorial Inaugural Address Delivered to the University Community on March 5, 2009.