

CURRICULUM VITAE DEBRA ROBERTS

Date of birth: 13 January 1961
Nationality: South African
Work address: Environmental Planning and Climate Protection Department
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Qualifications:

Watson International Scholars of the Environment Programme. Watson Institute for International Studies, Brown University - Providence, Rhode Island (USA). UNEP endorsed certification.

Post-Doctoral research with English Nature in 1993 (now Natural England - the statutory body responsible for conservation in England).

PhD (Urban Biogeography), University of Natal (1991).

Described by external examiner, Professor Jared Diamond (University of California - Los Angeles, USA) as: "*a massive effort of outstanding, breadth, vision and quality. The author has reviewed and mastered a database that ranges from politics and history to geology and botany*", an "*outstanding, comprehensive and imaginative study*".

B.Sc Hons, (Terrestrial Ecology and Biogeography) University of Natal (1983) (Cum laude).

B.Sc. (Environmental Biology, Cell Biology, Organic Chemistry and Analytical Chemistry) University of Natal (1982).

Previous employment:

- Lecturer and researcher at the (then) University of Natal, Durban, South Africa in the departments of Biological Sciences and Geographical and Environmental Sciences.

Current employment and related responsibilities:

- Established (1994) and heads the Environmental Planning and Climate Protection Department of eThekweni Municipality (Durban, South Africa). Core responsibilities include overseeing local level biodiversity and climate adaptation planning and developing the city's first resilience strategy.
- Appointed as Durban's first Chief Resilience Officer and responsible for overseeing the development of the city's first Resilience Strategy.
- Lead author of Chapter 8 (Urban Areas) and a contributing author to Chapter 12 (Africa) of Working Group II of the Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment Report.
- Member of the South African United Nations Framework Convention on Climate Change's (UNFCCC) negotiating team – following the adaptation and Loss and Damage streams.
- Member of various international advisory bodies focused on climate change issues in cities e.g.: the Rockefeller Foundation's Asian Cities Climate Change Resilience Network and vice-chair of UN-Habitat's HS-NET Advisory Board which oversaw the production of the 2011 "Cities and Climate Change" Global Report.

- Special advisor to ICLEI- Local Governments for Sustainability Global Executive Committee on the Durban Adaptation Charter. Led the development of the Durban Adaptation Charter at Local Government Convention at COP17-CMP7.
- Founding member of the Alliance for Sustainability and Prosperity for All.
- Member of the Sustainable Development Solutions Network Thematic Group on Sustainable Cities, working towards the establishment of an urban SDG as part of the post-2015 development regime.
- Member of the Future Earth Interim Engagement Committee and Future Earth Engagement Committee
- Contributing Author (Africa) for GEO6 United Nations Environmental Programme (UNEP).
- Member of the National Adaptation Plan Global Network Steering Committee.
- Written widely in the fields of urban open space planning, environmental management and urban climate protection and has received a number of awards for her work e.g. AfriCan Climate Research Award.

Relevant Publications:

Peer-reviewed articles

1. Diederichs, N. and Roberts, D. (2015). Climate protection in mega-event greening: the 2010 FIFA™ World Cup and COP17-CMP7 experiences in Durban, South Africa. *Climate and Development* (in press).
2. Leck, H. and Roberts, D. (2015). What lies beneath: understanding the invisible aspects of municipal climate change governance. *Current Opinion in Environmental Sustainability*, 13: 61-67.
3. Archer, D., Almansib, F., Digregorio, M., Roberts, D., Sharma, D. and Syam, D. (2014). Moving towards inclusive urban adaptation: approaches to integrating community-based adaptation to climate change at city and national scale. *Climate and Development*, 6(4): 345-356.
4. Revi, A., Satterthwaite, D., Aragón-Durand, A., Corfee-Morlot, J., Kiunsi, R.B.R., Pelling, M., Roberts, D., Solecki, Gajjar, S.P. and Sverdlik, A. (2014). Towards transformative adaptation in cities: the IPCC's Fifth Assessment. *Environment and Urbanization*, Vol. 26 (1): 11-28.
5. Costanza, R., Kubiszewski, I., Giovannini, E., Lovins, H., Mcglade, J., Pickett, K.E., Ragnarsdóttir, K.V., Roberts, D., De Vogli, R. and Wilkinson, R. (2014). Time to leave GDP behind. *Comment in Nature*, 505: 283–285.
6. Costanza, R., Mcglade, J., Bonvoisin, S., Fagerholm, P., Farley, J., Giovannini, E., Kubiszewski, I., Moore Lappé, F., Lovins, H., Pickett, K., Norris, G., Prugh, T., Ragnarsdottir, K.V., Roberts, D. and Wilkinson R. (2013). The future we really want. *Solutions*, 4 (4): 37-43.
7. Roberts, D. and O'Donoghue, S. (2013). Urban environmental challenges and climate change action in Durban, South Africa. *Environment and Urbanisation*, 25 (2): 299-319.
8. Walsh, C.L., Roberts, D., Dawson, R.J., Hall, J.W., Nickson, A. and Hounsome, R. (2013). Experiences of Integrated Assessment modelling in London and Durban. *Environment and Urbanisation*, 25 (2): 361-380.
9. Cartwright, A., Roberts, D., Blignaut, J., De Wit, M., Goldberg, K., Mander, M. and O'Donoghue, S. (2013). Economics of climate change adaptation at the local scale under conditions of uncertainty and resource constraints: the case of Durban, South Africa. *Environment and Urbanisation*, 25 (1): 139-156.

10. Roberts, D., Boon, R., Diederichs, N., Douwes, E., Govender, N., McInnes, A., Mclean, C. O'Donoghue, S., and Spires, M. (2012). Exploring ecosystem-based adaptation in Durban, South Africa: "learning-by-doing" at the local government coal face. *Environment and Urbanisation*, 24 (1): 167-195.
11. Carmin, J., Roberts, D. and Anguelovski, I. (2012). Urban Climate Adaptation in the Global South: Planning in an Emerging Policy Domain. *Journal of Planning Education and Research*, 32(1) 18 –32.
12. Roberts, D. (2010). Prioritising climate change and local level resilience in Durban, South Africa. *Environment and Urbanisation*, 22 (2): 397-413.
13. Roberts, D. (2008). Thinking globally, acting locally – institutionalising climate change at the local government level in Durban, South Africa. *Environment and Urbanisation*, 20 (2): 521-537.
14. Roberts, D. and Diederichs, N. (2002). Durban's Local Agenda 21 programme: tackling sustainable development in a post-apartheid city. *Environment and Urbanisation*, 14(1): 189-201.
15. Roberts, D. (1994). The design of an open space network for the City of Durban (South Africa). *Environmental Conservation*, 21(1): 11-17.
16. Roberts, D. (1993). The vegetation ecology of Municipal Durban. Natal. Floristic classification. *Bothalia*, 23(2): 271-326.
17. Poynton, J.C. and Roberts, D. (1985). Urban Open Space planning in South Africa: A biogeographical perspective. *South African Journal of Science*, 81: 3-37.
18. Roberts, D. and Poynton, J.C. (1985). Central and peripheral urban open spaces: need for a biological evaluation. *South African Journal of Science*, 82: 464-466.

Book Chapters and Books

1. Roberts, D., Morgan, D., O'Donoghue, S., Guastella, L., Hlongwa, N., and Price, P. (2015). Durban, South Africa: Working Towards Transformative Adaptation in an African City in Satterthwaite, D. and Bartlett, S (eds) *Cities in a Finite Planet*, Routledge (forthcoming)
2. Roberts, D. (2015). City action for global environmental change: assessment and case study of Durban, South Africa in Seto, K.C., Solecki, W. and Griffith, C. (eds), *Handbook on urbanization and global environmental change*. Routledge, (in press).
3. Mather, A. and Roberts, D. (2015). Climate change and the coasts of Africa: Durban case study, in Glavovic, B.C., Kelly, M., Kay, R. and Travers, A. (eds) *Climate Change and the Coast Building Resilient Communities*, CRC Press (Taylor and Francis Group) Boca Raton, Florida, USA.
4. Revi, A., D.E. Satterthwaite, F. Aragón-Durand, J. Corfee-Morlot, R.B.R. Kiunsi, M. Pelling, D.C. Roberts and Solecki, W. (2014). Urban Areas in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [C.B. Field, V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 535-612.
5. Carmin, J.C., Roberts, D. and Anguelovski, I. (2012). Preparing Cities for Climate Change: Early Lessons from Early Adaptors in Hoornweg, D., Freire, M., Lee, M.J., Bhada Tata, P. and Yuen, B. (eds.), *Cities and Climate Change: Responding to an Urgent Agenda, Volume 2*. Washington, DC: World Bank.
6. Anguelovski, I and Roberts, D. (2011). Spatial justice and climate change: multi-scale impacts and local development in Durban, South Africa in Carmin, J. and Agyeman,

- J. (eds) *Environmental Inequalities Across Borders: Local Perspectives on Global Injustices*, MIT Press, Cambridge, Massachusetts.
7. Mather, A., Roberts, D. and Tooley, G. (2011). Adaptation in Practise: Durban, South Africa in Otto-Zimmermann, K. (ed) *Resilient Cities. Cities and Adaptation to Climate Change – Proceedings of the Global Forum 2010*. ICLEI – Local Governments for Sustainability, Springer, Heidelberg.
 8. Roberts, D. (2009). Thinking globally, acting locally – institutionalising climate change at the local government level in Durban, South Africa in Bicknell, J., Dodman, D. and Satterthwaite, D. (eds) *Adapting cities to climate change: understanding and addressing the development challenges*. Earthscan, London.
 9. Roberts, D., Boon, R., Croucamp, P. and Mander, M. (2005). Resource Economics as a tool for open space planning in Durban, South Africa in Ted Trzyna (ed) *The Urban Imperative. Urban outreach strategies for protected area agencies*, California Institute of Public Affairs, Sacramento, California.
 10. Roberts, D. (2005). Durban's Local Agenda 21/Local Action 21 Programme: A vehicle for social inclusion? in Herrle, P. and Walther, U-J. (eds) *Socially inclusive cities. Emerging concepts and practice*. Lit Verlag, Munster.
 11. Roberts, D. (2003). Sustainability and equity: reflections of a local government practitioner in southern Africa in Agyeman, J., Bullard, R.D. and Evans, B. (eds) *Just sustainabilities. Development in an unequal world*, EarthScan, London. Also MIT Press.
 12. Roberts, D. (2003). Using the development of an environmental management system to develop and promote a more holistic understanding of urban ecosystems in Durban South Africa in Berkowitz, A.R., Nilon, C.H. and Hollweg, K.S. (eds) *Understanding urban ecosystems. A new frontier for science and education*, Springer/Verlag, New York.
 13. Roberts, D. and Diederichs, N. (2002). Durban's Local Agenda 21 programme 1994-2001: Tackling sustainable development. International Institute of Environment and Development. Natal Printers, Durban.
 14. Roberts, D., Mander, M. and Boon, R. (2002). An urban challenge: Conserving biodiversity in the Ethekewini Municipality, KwaZulu-Natal in Pierce, S.M., Cowling, R.M., Sandwith, T. and MacKinnon, K. (eds) *Mainstreaming biodiversity in development. Case studies from South Africa*, World Bank, Washington.
 15. Roberts, D. (1996). Urban environmental planning and management – the challenge of sustainable development in Reddy, P.S. (ed) *Readings in Local Government Management and Development: a Southern African Perspective*, Juta & Co, Kenwyn.