



Disaster Prevention Research Institute
Kyoto University, Uji, Kyoto, Japan
京都大学 防災研究所

DPRI Award 2020
for Outstanding Contributions
in Research and Education

研究教育貢献賞

Prof. Andrew Collins
Professor of the Northumbria University

選考経緯・業績紹介・講演資料

Feb. 20, 2020

目 次

DPRI Award 設立の趣旨および第6回 DPRI Award 受賞者決定の経緯	1
Andrew Collins 教授の御略歴	4
Andrew Collins 教授 防災研究所への貢献への足跡	6
論文リスト	8
講演要旨	24
“Progress and prospect for action data in people centred disaster risk reduction”	

DPRI Award 設立の趣旨および第 6 回 DPRI Award 受賞者決定の経緯

研究教育担当副所長 畑山 満則

防災研究所は、国内外で発生する自然災害を研究対象とすることから、従来から国際交流協定の締結、国際共同研究、海外災害調査や留学生・海外共同研究者の受け入れなど積極的に取り組んできました。平成 22 年度に認定され開始した共同利用・共同研究拠点は平成 28 年度から 2 期目に入り、今年度の中間評価では A 評価となりました。また、防災研究所が事務局を務める世界防災研究所連合（GADRI）は、2019 年 3 月に第 4 回世界防災研究所サミットを開催いたしました。さらに、第 5 回世界防災研究所サミットは 2021 年にイタリアで開催を予定しています。このように防災研究所は頻発する国内外での自然災害に備えるための国際防災研究拠点として、その地位を確立するために、様々な新しい取り組みを推進しています。

これらの一環として平成 23 年 3 月に「京都大学防災研究所国際表彰規程」が制定され、DPRI Award が設立されました。その表彰の要件は概略下記のとおりです。

- 1) 防災研において、客員教員や共同研究者などとして滞在し、セミナーや共同研究などを実施し、防災研の研究教育に成果を上げた方
- 2) 防災研が主催する研究集会等において、基調講演、招待講演等を務め、又は企画運営に携わり、防災研の活動に貢献した方
- 3) 防災研が実施する国際共同研究及び現地調査等において貢献した方

平成 25 年度には第 1 回の防災研究所国際表彰 DPRI Award をカリフォルニア工科大学名誉教授の金森博雄博士に授与いたしました。また、平成 26 年度には第 2 回 DPRI Award をメキシコ自治大学教授のフランシスコ・サンチェズセスマ博士に、平成 27 年度には第 3 回 DPRI Award をウォータールー大学教授のキース・ハイペル博士に、平成 28 年度の第 4 回 DPRI Award では、ローザンヌ大学教授のミシェル・ジャボイェドフ博士と国際応用システム分析研究所のリスク・レジリエンスプログラムに授与いたしました。平成 30 年度の第 5 回

DPRI Award ではネバダ大学リノ校教授のジョン・グレッグ・アンダーソン博士に「研究教育業績賞」を授与いたしました。

今回令和元年度の国際表彰について、令和元年 11 月に防災研究所の多々納教授から推薦があり、表彰選考委員会で慎重に審議しました。その結果、ノーサンブリア大学教授のアンドリュー・コリンズ博士を「研究教育貢献賞」として、第 6 回の防災研究所国際表彰 DPRI Award の受賞者として所長に推薦することを決定いたしました。その後、所長の承認を受け、これを教授会に諮り承認されました。

コリンズ教授は 1961 年英国に生まれ、1996 年にキングス・カレッジ・ロンドンで博士号 (Ph.D) を取得後、国際開発コンサルタントを経て、2000 年にはノーサンブリア大学の Disaster Management and Sustainable Development に関する大学院プログラムの設立リーダーを務められました。2001 年から Senior Lecturer、2007 年から Raeder を経て、2012 年に教授に着任され、2013 年からは Disaster and Development Network (DDN) のリーダーを務められています。

コリンズ教授は、人文地理学を専門とされ、災害管理と途上国の持続可能な開発に関して、数多く実践的な研究成果を残されています。これらは、学位取得後、戦時中のモザンビークのコミュニティへの 3 年間の自発的な支援を含めアフリカと中東で長期間にわたって行われた研究・ボランティア活動がベースとなったものであり、近年、防災研究所が推進する実践科学 (Implementation Science) の研究成果として高い評価を受けているものです。また、世界初と Disaster Management and Sustainable Development に関する大学院プログラムの設立を主導されるなど、教育面でも多大な貢献をなされています。

防災研究所には、2004 年の国連防災会議時の訪問を機に、11 度訪問されており、防災教育や地域実践に関する共同研究や研究指導をされるとともに、関連する講義やゼミナールを通じて、人文地理学をベースに若手研究者や学生への教育を熱心に行われました。また、防災研究所が立ち上げを主導した世界防災研究所連合 (GADRI: Global Alliance of Disaster Research Institutes) には第 1 回サミットから参加され、現在は、ヨーロッパアフリカ地区の理事として、英国におけるアライアンスである UKADR の立ち上げに尽力いただいています。

これらコリンズ教授との共同研究や彼の学生・若手研究者への継続的な研

究・教育の実績は、防災研究所の国際プレゼンスの向上に大いに寄与してきました。コリンズ教授にはこれまでのご貢献に深く感謝するとともに、今後も受賞者に授与される終身称号の **DPRI Fellow** として、防災研究所の研究・教育に大所高所からご指導・ご助言いただければ大変ありがたく存じます。

Andrew Collins 教授の御略歴

氏名 : Andrew Collins
(アンドリュー コリンズ)

生年月日 : 1961 年

国籍 : イギリス

称号 : Professor, PhD. Geography



所属機関名 : Northumbria University (ノーザンブリア大学)

部局 : Faculty of Engineering and Environment (工学・環境学部)

所在地: B308, Ellison Building, Newcastle-upon-Tyne, Ne1 8ST UK
(ニューキャッスル, イギリス)

現職名 : Full Professor (正教授) in Disaster and Development
Head of Subject for Human Geography, Policy and Development
Leader of Disaster and Development Network (DDN)

専門分野 : Geography (地理学)

主な学歴 : 大学以降の学位を取得した機関名、学位及び取得年

Kingston University, BSc (First Class Hons) 1992

King's College, London, PhD (Geography) 1996

Northumbria University, PgC University Teaching and Learning 1998

主な職歴 機関名・部局：

1998年～現在

Consultant for international development or disaster reduction projects with International Organisations (IOs), Governments (GOs), and Non-Governmental Organisations (NGOs) including DFID, UK Government Office for Science, Trocaire, World Bank, USAID, FAO, IFAD, UNICEF, UNDP.....

2000年～2003年

Founding Leader, Postgraduate Programme in Disaster Management and Sustainable Development, Northumbria University

2001年～2007年

Senior Lecturer in Sustainable Development, Northumbria University

2004年～2013年

Director of the Disaster and Development Centre (DDC)

2007年～2012年

Reader (Disaster and Development), School of the Built and Natural Environment, Formerly School of Applied Sciences

2012年～現在

Professor (Disaster Development), Faculty of Engineering and Environment, Northumbria University

2013年～現在

Leader of the Disaster and Development Network (DDN)

2016年～現在

Head of Subject for Human Geography, Policy, and Development, Northumbria University

Andrew Collins 教授 防災研究所への貢献の足跡

2004(平成 16)年度 1 月 13-19 日	国連防災会議時に来日、防災研究所訪問
2007 (平成 19) 年度 1 月 16 日～19 日	防災研究所 第 2 回日英災害リスク管理セミナー参加
2009 (平成 21) 年度 10 月 13 日～15 日	防災研究所共催で開催された第 9 回 IIASA-DPRI 総合防災に関する国際会議参加
2011 (平成 23) 年度 11 月 24 日～26 日	第 1 回 DRR,DPRI 研究所サミット (のちの GADRI) に DDC 代表として参加、発表
2012 (平成 24) 年度 3 月 24 日	第 2 回防災研究所世界サミットの準備会合と発表
2013 (平成 25) 年度 3 月 11 日～13 日	災害研究所グローバルシンポジウムにて基調講演を行う
2015 (平成 27) 年度 3 月 19 日～20 日	自然災害研究協議会の共催で開催された第 2 回 GADRI サミットに参加、基調講演を行う
2017 (平成 29) 年度 3 月 19 日～21 日	第 3 回 GADRI サミット (セッション司会を務める) GADRI 理事会に参加、発表
11 月 21 日～22 日	東京で開催された GADRI 理事会に参加

2018（平成 30）年度

3 月 13 日～16 日

GADRI Open Discussion Forum、GADRI 理事会に参加、発表

2019（平成 30）年度

3 月 13 日～15 日

第 4 回 GADRI サミットにて基調講演を行う
GADRI 総会で司会を務める

Andrew Collins 教授 論文リスト

Books:

2019

1. Brauch, H.G., Oswald Spring, U., **Collins, A.E.** and Serrano Oswald, S.E. (Eds.)(2019) *Climate Change, Disasters, Sustainability Transition and Peace in the Anthropocene*, Springer.

2018

1. Roosli, R. Rusdi, Mohd Sanusi, M., Ahamad, S. and **Collins, A.E.** *An Indonesian Study of Mixed Methods: An Example of Methodological Triangulation*, Cambridge Scholars Publishing, UK.

2015

1. **Collins, A.E.**, Jones, S., Manyena, B. and Jayawickrama, J. (Eds.) *Hazards, Risks and Disasters in Society*, Hazards Risks and Disasters Series, Elsevier, Oxford. ISBN 978-0-12-396451-9 (23 chapters, 405 pages)

2009

1. **Collins, A.E.** *Disaster and Development*, Routledge Perspectives in Development Series, London. ISBN: 9780415426671 (285 pages)

1998

1. **Collins, A.E.** *Environment, Health and Population Displacement: Development and Change in Mozambique's Diarrhoeal Disease Ecology*, Making of Modern Africa Series, Ashgate, Aldershot. (332 page book - 57 figures and 36 tables).

Book Chapters:

2019

1. Eburn, M., **Collins, A.E.** and Da Costa, K. 'Recognising limits of international law in DRR as problem and solution', in Samuel, K., Aronsson-Storrier, M. and Bookmiller, K.N. (Eds.) *The Cambridge Handbook of Disaster Risk Reduction and International Law*, Cambridge University Press.
2. **Collins, A.E.** 'Advancing Disaster and Conflict Risk Reduction', in Brauch, H.G., Oswald Spring, U., Collins, A.E. and Serrano Oswald, S.E. (Eds.) *Climate Change*,

Disasters, Sustainability Transition and Peace in the Anthropocene, Springer. pp.7-26.

2017

1. **Collins, A.E.** 'Applications of disaster risk reduction principles and operational mechanisms to migration in contexts of instability', in Sudmeier-Rieux, K., Jaboyedoff, M., Fernandez, M., Penna, I. and JC Gaillard (Eds.) *Identifying Emerging Issues in Disaster Risk Reduction, Migration, Climate Change and Sustainable Development*, Springer. pp.127-44.

2015

1. **Collins, A.E.** 'Risk governance and development', in Paleo, U.F. (Ed.) *Risk Governance: The articulation of hazards, politics and ecology*, London: Springer, pp.477-80.
2. **Collins, A.E.** 'Beyond experiential learning in disaster and development communication' in: Egner, H., Schorch, M. and Voss, M. (Eds.) *Learning and Calamities: Practices, Interpretations, Patterns*, London: Routledge, pp.56-76.

2012

1. Nahar, P., Alamgir, F., **Collins, A.E.**, Ray-Bennett, N. and Bhuiya, A. 'Interrelation between water, health and livelihood in disasters. In Prakash, A., Saravanan, V.S. and Chourey, J. (eds). *Interlacing Water and Human Health: Case Studies from South Asia*. Sage Publications, New Delhi, pp.405-24.

2010

1. **Collins, A.E.** 'Human Rights', in *Encyclopaedia of Disaster Relief*, Volume 1, SAGE Publications Inc, pp.310-13.
2. **Collins, A.E.** 'Environment, health, population displacement, and sustainable development: the case of cholera and bacillary dysentery', in Akhtar, R. and Izhar, N. (eds.) *Global Medical Geography: essays in honour of Prof. Yola Verhasselt*, Jaipur: Rawat Publications, pp.145-56.

1996

1. **Collins, A.E.** The geography of cholera. In Drasar, B.S and Forrest, B.D (eds.) *Cholera and the ecology of Vibrio cholerae*. Chapman and Hall, London, pp. 255-94.

Journal Papers:

2019

1. Rahman, G., Rahman, A., Ullah, S., Miandad, M., and **Collins, A. E.** 'Spatial analysis of landslide susceptibility using failure rate approach in the Hindu Kush region, Pakistan', *Journal of Earth System Science*, 128:3, 59. doi:10.1007/s12040-019-1066-0.
2. Abedin, A., **Collins, A.E.**, Hababi, U. and Shaw, R. 'Climate change, water scarcity, and health adaptation in southwestern coastal Bangladesh', *International Journal of Disaster Risk Science*, 10:1, pp.28-42.

2018

1. **Collins, A.E.** 'Advancing the disaster and development paradigm', *International Journal of Disaster Risk Science*, 9:4, pp.486-95.

2017

1. Rahman, G., Rahman, A., Khan, S. and **Collins, A.E.** 'Geospatial analysis of landslide susceptibility and zonation in Shahpur Valley, Eastern Hindu Kush using frequency ration model', *Proceedings of the Pakistan Academy of Sciences*, 54:3, pp.149-163.
2. Mavhura, E., Manyena, S.B. and **Collins, A.E.** 'Measuring social vulnerability in context: the case of Muzarabani in Zimbabwe', *Geoforum*, 86, pp.103-114.
3. **Collins, A.E.**, Tatano, H., James, W., Wannous, Cl, Takara, K., Murray, V., Scawthorn, C., Mori, J., Aziz, S., Mosalam, K.M., Hochrainer-Stigler, S., Alcántara-Ayala, I., Krausmann, E., Li, W.S., Cruz, A.M., Samaddar, S., De-Groove, T., Ono, Y., Berryman, K., Suzuki, K., Parry, M.A., McGowran, P., and Rees, J.G. 'The 3rd Global Summit of Research Institutes for Disaster Risk Reduction: Expanding the Platform for Bridging Science and Policy Making', *International Journal of Disaster Risk Science*, 8:2, pp.224-230.

2016

1. Roosli, R. and **Collins, A.E.** 'Key Lessons and Guidelines for Post-Disaster Permanent Housing Provision in Kelantan, Malaysia', *Procedia Engineering*, 145, pp.1209–1217.

2. Mavhura, E., **Collins, A.E.** and Bongo, P.P. 'Flood vulnerability and relocation readiness in Zimbabwe', *Disaster Prevention and Management*, 26:1, pp.41-54.
3. Manyena, S.B., **Collins, A.E.**, Mudimba, F. and Mudimba, D. 'Reducing marginalisation of fishers through Participatory Action Research in the Zambezi Valley, Zimbabwe', *International Journal of African Development*, 3:2, pp.5-22.
4. Muzenda-Mudavanhu, C., Manyena, S.B. and **Collins, A.E.** 'Disaster risk reduction knowledge among children in Muzarabani District, Zimbabwe', *Natural Hazards*, 84, pp.911-931.
5. Ray-Bennett, N., **Collins, A.E.**, Edgeworth, R., Bhuiya, A., Nahar, P. and Alamgi, F. 'Everyday health security practices as disaster resilience in rural Bangladesh', *Development in Practice*, 26:2, pp.170-183.
6. Adeniyi, O., Perera, S., and **Collins, A.E.** 'Review of finance and investment in disaster resilience in the built environment', *International Journal of Strategic Property Management*, 20:3, pp.224-238.

2015

1. Mudavanhu, C., Manyena, S.B., **Collins, A.E.**, Bongo, P., Mavhura, E. and Manatsa, D. 'Taking children's voices in disaster risk reduction a step forward', *International Journal of Disaster Risk Science*, 6:3, pp.267-81. Springer.
2. Islam, M.S., Islam, M.S., Mahmud, Z.H., Cairncross, S., Clemens, J.D. and **Collins, A.E.** 'Role of phytoplankton in maintaining endemicity and seasonality of cholera in Bangladesh', *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 109:9, pp.572-8.

2014

1. Mbakem, E.A. and **Collins, A.E.** 'Dealing with the grey contours: displacement circumstances and livelihood adaptation between Congo Brazzaville and the United Kingdom', *Journal of Asian and African Studies*, 49:1, pp.100-14.
2. Rahman, A., Nawaz Khan, A. and **Collins, A.E.** 'Analysis of landslide causes and associated damages in the Kashmir Himalayas of Pakistan', *Natural Hazards*. 71:1, pp. 803-821.

2013

1. Holla, K., Kampova, K., Peterkova, A. and **Collins, A.E.** 'Complex model of risk assessment of industrial processes (MOPORI), *Communications 2*, pp.63-68.
2. Mavhura, E., Manyena, B., **Collins, A.E.** and Manatsa, D. 'Indigenous knowledge, coping strategies and resilience to floods in Muzarabani, Zimbabwe', *International Journal of Disaster Risk Reduction*, 5, pp.38-48. Elsevier. <http://www.journals.elsevier.com/international-journal-of-disaster-risk-reduction/recent-articles/10.1016/j.ijdrr.2013.07.001>
3. **Collins, A.E.** 'Editorial - Linking disaster and development: further challenges and opportunities' Special Edition, *Environmental Hazards*, 12:1, pp.1-4.
4. Hyslop, M.P. and **Collins, A.E.** 'Hardened institutions and Disaster Risk Reduction', Special Edition - Linking Disaster and Development: Further challenges and opportunities, *Environmental Hazards*, 12:1, pp.19-31.
5. Nahar, P., **Collins, A.E.**, Bhuiya, A., Alamgir, F., Ray Bennett, N. and Edgeworth, R. 'Indigenous indicators of health security in relation to climatic disasters in Bangladesh', Special Edition - Linking Disaster and Development: Further challenges and opportunities, *Environmental Hazards*. 12:1, pp.32-46.
6. **Collins, A.E.** 'Applications of the disaster risk reduction approach to migration influenced by environmental change', *Journal of Environmental Science and Policy*, 27:S1, pp. S112-S125.
7. Jones, S., Aryal, K. and **Collins, A.E.** 'Local-level Governance of Risk and Resilience in Nepal', *Disasters*, 37:3, pp.442-67.

2012

1. **Collins, A.E.** 'Why disaster warning and development go hand in hand'. Opinion Article, *Science and Development Network, SciDev.Net*; supported by *Nature* and *Science*. (35,000 visits per week) <http://www.scidev.net/en/agriculture-and-environment/improving-early-warning-of-disasters/opinions/why-disaster-warning-and-development-go-hand-in-hand-1.html>
2. **Collins, A.E.** Editorial – 'The Impact of Development on Violent Nature', *Journal of Geography and Natural Disasters*, 2:3, e107.
3. Manyena, S.B., **Collins, A.E.**, Mudimba, F. and Mudimba, D. "Are you serious to ask me about who owns wildlife? – Politics of Autonomy over Wildlife resources in the Zambezi Valley, Zimbabwe", *Forum for Development Studies*, 40:1, pp.1-23.

2011

1. **Collins, A.E.** 'Representations of disaster and development in the Sendai emergency' in The earthquake, the tsunami and the nuclear meltdown in Japan: responses from the communicating disaster research group, *ZiF-Mitteilungen 2*, pp.12-14. <http://www.uni-bielefeld.de/%28en%29/ZIF/FG/2010CommunicatingDisaster/veroeffentlichung.htm>
2. Rahman, A., Khan, A.N., **Collins A.E.** and Qazi, F. 'Causes and extent of environmental impacts of landslide hazard in the Himalayan region: a case study of Murree, Pakistan', *Natural Hazards*, 57, pp.413-34. <http://www.springerlink.com/content/7033620188912254/fulltext.pdf>

2010

1. Alam, E. and **Collins, A.E.** 'Cyclone disaster vulnerability and response experiences in coastal Bangladesh', *Disasters*, 34:4, pp.931-53. <http://www3.interscience.wiley.com/cgi-bin/fulltext/123497735/PDFSTART>
2. Williams, L., **Collins, A.E.**, Bauaze, A. and Edgeworth, R. 'The role of risk perception in reducing cholera vulnerability', *Risk Management: an International Journal*, 12, pp.163-84.
3. Nahar, P., Alamgir, F., **Collins, A.E.**, and Bhuiya, A. 'Contextualising disaster in relation to human health in Bangladesh', *Asian Journal of Water, Environment and Pollution*, 7:1, pp.55-62.
4. Ray-Bennett, N., **Collins, A.E.**, Bhuiya, A., Edgeworth, R., Nahar, P and Alamgir, F. 'Exploring the meaning of health security for disaster resilience through people's perspectives in Bangladesh', *Health and Place*, 16: pp.581-9. <http://dx.doi.org/10.1016/j.healthplace.2010.01.003>

2009

1. Alamgir, F., Nahar, P., **Collins, A.E.**, Shankar Ray-Bennett, N. and Bhuiya, A. 'Climate change and food security: health risks and vulnerability of the poor in Bangladesh', *The International Journal of Climate Change Impacts and Responses*, 1: pp.37-54. ISSN Common Ground Publishing.

2008

1. Manyena, S.B., Mutale, S.B. and **Collins, A.E.** Sustainability of rural water supply and disaster resilience in Zimbabwe, *Water Policy* 10:6, pp. 563-575.

2. Manyena, S.B., Fordham, M. and **Collins, A.E.** Disaster Resilience and Children: Managing Food Security in Binga District in Zimbabwe, *Children, Youth and Environments* 18:1. pp. 303-331. <http://www.colorado.edu/journals/cye>

2006

1. **Collins, A.E.**, Lucas, M.E., Islam, M.S., and Williams, L.E. Socio-economic and environmental origins of cholera epidemics in Mozambique: guidelines for tackling uncertainty in infectious disease prevention and control, *International Journal of Environmental Studies* Special Issue on Africa, 63:5, pp. 537-549.
2. Edgeworth, R. and **Collins, A.E.** Self-Care as a Response to Diarrhoea in Rural Bangladesh: Empowered Choice or Enforced Adoption? *Social Science and Medicine*, 63, pp. 2686-97.

2003

1. **Collins, A. E.** Vulnerability to coastal cholera ecology, *Social Science and Medicine*, 57, pp. 1397-1407.

2002

1. **Collins, A. E.** Health ecology and environmental health management in Mozambique, in Special issue: *Southern African Perspectives on Health Geography. Health and Place*, 8:4, pp. 263-72. Elsevier Science Ltd.

2001

1. **Collins, A.E.** Health ecology, land degradation and development. *Land Degradation and Development*, 12:3, pp. 237-250.
2. Kirkby, J., Howorth, C., O'Keefe P. and **Collins, A.E.** (2001) A survey of evaluation experience in complex emergencies. A paper first presented to the ESRC Politics of Emergency Seminar "Humanitarian Interventions: Constructing the Threshold of Crisis", hosted by the Centre for Transnational Studies, University of Newcastle. Published in *The International Journal of Human Rights*, 5:2, pp. 114-129.

1996

1. **Collins, A.E.** Environment, health, population displacement and sustainable development. A paper presented to the International Seminar on Environment, Sustainable Development and Human Health at Varanasi, India February 11-15, 1995. Published in the *Journal of Environment, Disease and Health Care Planning* 1:2, pp. 27-36 New Delhi.

1993

1. **Collins, A.E.** Environmental influences on the distribution of incidence of cholera: a case study in Quelimane, Mozambique. *Disasters* 17:4, pp. 321-40.
2. **Collins, A.E.** Environment and cholera in Quelimane, Mozambique: a spatial study. *King's College Department of Geography Occasional Paper No.39.*

Selected Conference Proceedings:

2019

1. Tatano, H. and Collins, A.E. *Proceedings of The Third Global Summit of Disaster Research Institutes, Kyoto, University, Springer.*

2015

2. Adeniyi, O., Perera, S., and **Collins, A.E.** 'Enhancing investment in Disaster Resilience of the built environment of SMEs: Developing a conceptual framework', *Proceedings of 5th International Conference on Building Resilience, 15 -17 July 2015, Newcastle, Australia.*

(2014 still to be added)

2013

1. Mohammad, S.M. and **Collins, A.E.** 'Disaster Risk Reduction in Bangladesh as an adaptation strategy for climate change', *Proceedings of the ANDROID Residential Doctoral School, Limassol, Cyprus, 23-24 October 2013, pp.93-101.*
2. Mohammad, S.M. and **Collins, A.E.** 'People's perception of climate change and adaptation strategies: a comparative study from Bangladesh', a paper of the Global Change and Resilience Conference, Brno, Czech Republic, 22nd-24th May.
3. Mohammad, S.M. and **Collins, A.E.** 'A socio-economic geography of disaster and development at Char Sthal Noahata, Bangladesh. In Singh, S.E., Phadke, A., Kurhekar, V., Roy, S. and Savanur, P.K. (Eds.), *Proceedings of UGC Sponsored Two Day International Conference on Geography of Change: Contemporary Issues in Development, Environment and Society*, Thane, India: Vidya Prasarak Mandal's K.G. Joshi College of Arts & N.G. Bedekar College of Commerce, 11th-12th January, pp.113-124.

2009

1. Shiroshita, H., Kawata, Y. and **Collins A.E.** 'Differences in the approach to school

disaster education between Japan and the UK', The 21st EAROPH World Congress, CD-ROM. <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan034791.pdf>

2008

1. **Collins, A.E.** 'Climate Change and Infectious Disease Risk Reduction', *Proceedings of the UK – Asia Scientists and Practitioners Seminar*, a Pre-event of the 3rd Asian Ministerial Conference on Disaster Risk Reduction, Kuala Lumpur, Malaysia, 1st December.
2. **Collins, A.E.** 'Health Security or Climate Change Adaptation? What do we really mean by Disaster Risk Reduction in times of disease?' *Proceedings of the International Disaster and Risk Conference (IDRC)*, Davos, Switzerland, August 25th – 29th, pp. 136-139.
3. Aryal, K., **Collins, A.E.**, Jones, S., Manyena, B. and Erdogan, N. 'Risk and Resilience Committees in Nepal as a Community Based Approach to Disaster Reduction', *Proceedings of the International Disaster and Risk Conference (IDRC)*, Davos, Switzerland, August 25th – 29th, pp. 70-73.
4. Alam, E. and **Collins, A.E.** (2008) 'Understanding Vulnerability and Local Responses to Cyclone Disasters: Experiences from the Bangladesh Coast', *Proceedings of the International Disaster and Risk Conference (IDRC)*, Davos, Switzerland, August 25th – 29th, pp. 768-770.
5. Jayawickrama, J. and **Collins, A.E.** (2008) 'Why is there more laughter in refugee camps than on the streets of London?' Conference paper for Mental Wellbeing and Happiness session of the Institute of British Geographers / Royal Geographical Society Annual Conference, Royal Geographical Society, 29th – 31st August.

2006

1. Jayawickrama, J. and **Collins, A.E.** Community-based Response to Psychosocial Challenges, opening conference paper in collaboration with UNHCR for Third Annual International Mental Health Conference, "People on the Move", Institute of Psychiatry, King's College London, 30th August – 1st September.
2. **Collins, A.E.** Infectious disease risk management in Africa, conference paper for Epidemics and Disasters Session of the XVI International Sociological Association (ISA) World Congress of Sociology, Durban, South Africa, 23-29 July.
3. Anu-Mbakem, E. and **Collins, A.E.** Displacement, identity and sustainable livelihoods in Brazzaville and Newcastle-upon-Tyne, conference paper for 10th

International Association for the Study of Forced Migration, Toronto, Canada, 18-22 June.

4. **Collins, A.E.** (2006) Health ecology in disaster reduction strategies: lessons from Mozambique, conference paper and Chair for Africa Disasters Session of the XVI International Sociological Association (ISA) World Congress of Sociology, Durban, South Africa, 23-29 July.
5. **Collins, A.E.** and Williams, L.E. (2006) Community engagement with integrated disease risk management, Proceedings of the International Disaster Reduction Conference (IDRC), Davos, Switzerland, 27 Aug – 1 Sept, pp. 120-123.
6. **Collins, A.E.** and Shaw, I. (2006) Universities supporting disaster planning, response and investigation, conference paper for Dealing with Disasters: planning, response and investigation, University of Teesside, 20th – 21st September.
7. **Collins, A.E.**, Anu-Mbakem, E., Manyena, B. and Brady, E. (2006) Refugee identity, livelihoods and resilience: a story of children's social capital in the northeast of England, conference paper for Session on Participatory Approaches to Community Cohesion and Integration Research, Royal Geographical Society-Institute of British Geographers (RGS-IBG) Annual International Conference, 30 Aug – 1 Sep.
8. **Collins, A.E.** (2006) Disaster Risk Management Education, presentation paper to the 1st Japan – UK Disaster Risk Reduction Seminar: Education and Practice, 18-19 January. Leader in *Perspectives*: The Japan Foundation London Newsletter, 16.

2005

1. **Collins, A.E.** What Integrated Infectious Disease Risk Assessment Teaches about Mitigating the Impact of New Disease Epidemics. Proceedings of the Fifth Annual IIASA-DPRI Forum on Integrated Disaster Risk Management: Innovations in Science and Policy, Beijing Normal University, 13th – 18th September 2005.

2001

1. **Collins, A.E.** An ecology of health and risk in coastal Mozambique. Paper presented at Royal Geographical Society / Institute of British Geographers Annual Conference, Plymouth, 2001.
2. **Collins, A.E.** Learning by doing: lessons from disaster management, conference paper to RGS-IBG Northumbria University Conference 'Beyond the Academy', 10th September 2001.

1999

1. **Collins, A.** Cholera Distribution in Coastal Populations. Paper presented at International Centre for Ocean and Human Health workshop on Indicators of Ocean and Human Health, Bermuda Biological Station for Research, November 16-19, 1999. Funded by Harvard School of Public Health.
3. **Collins, A.E.** 'Data collection in other worlds'. Presented at Approaches and Techniques for People-Oriented Field Projects workshop, Royal Geographical Society (with the Institute of British Geographers), 17th–18th April 1999.

1996

1. **Collins, A.E.** Emergent ecology of cholera and bacillary dysentery in Mozambique: implications for environmental health management. A paper presented to the Seventh International Symposium in Medical Geography, University of Portsmouth (1996).

Indicative Project and Policy Reports:

2015

1. **Collins, A.E.** et al. 'Behavioural Monitoring Survey for HIV in Mozambique Transport Corridor Sites, Family Health International FHI360, Maputo, Mozambique.

2014

1. **Collins, A.E.**, Abrahams, J. and Murray, V. 'Human health, climate risk management and disaster reduction post HFA', a paper for the Global Assessment Report (GAR) on Disaster Risk Reduction, United Nations: Geneva.

UNDP

2012

1. Mbakem, A.E. and **Collins, A.E.** 'Disaster Livelihoods and Food Security in the South West Region of Cameroon Following Volcanic Eruptions', Study Report supported by the British Academy Small Grants Scheme.

2011

1. **Collins, A.E.** 'What Mechanisms are there for reacting to environmental shocks?' UK *Government Foresight Project: Global Environmental Migration: Review SR5* Commissioned by HM Govt. Chief Advisor for Science. <http://www.bis.gov.uk/assets/bispartners/foresight/docs/migration/science-reviews/11-1124-sr5-mechanisms-for-reacting-to-environmental-shocks.pdf>

2010

1. **Collins, A.E.** et al. The meaning of health security for disaster resilience in Bangladesh: Full Research Report, ESRC End of Award Report, RES-167-25-0241. Swindon: ESRC

2009

1. **Collins, A.E.** 'The people centred approach to early warning systems and the 'Last Mile', in International Federation of the Red Cross and Red Crescent Societies (IFRC), Focus on Early Warning, Early Action, *World Disaster Report*, Chapter 2, pp. 39-68.
2. Fordham, M. and **Collins, A.E.** 'Evaluation of mainstreaming livelihood centred approaches to Disaster Risk Reduction (DRR)', Practical Action, DFID, UK.
3. **Collins, A.E.** et al. 'Simplified Environmental Assessment of Farmer Income Support Project - Coconut Lethal Yellowing Disease (CLYD)', Ministry of Planning and Development, Government of Mozambique, Millennium Challenge Corporation, Agema Consultoria Lda.

2008

1. Dombrowsky, W. and **Collins, A.E.** 'Expert curriculum assessment and development in disaster management' for University of Peshawar, Pakistan; GTZ (German Agency for Technical Cooperation) and ICIMOD (International Centre for Integrated Mountain Development).

2005

1. Baffoe-Bonnie, B., Yeboah, F.A., Buabeng, S.N., Ofori, E. and **Collins, A.E.** Human Health Vulnerability and Public Health Adaptation to Climate Change in Ghana: Health Assessment, for Government of Ghana and Netherlands Climate Assistance Programme.

2004

1. **Collins, A.E.** and Manyena B. Monitoring and Evaluation of Agricultural Reconstruction Programme Two and Three (ARP II and ARP III) for Government of East Timor / World Bank.
2. **Collins, A. E.** and SCF Mitigation of the impact on HIV/AIDS on OVC's and OVC households in Mozambique. Save the Children.
3. **Collins A. E.** Beneficiary impact evaluations of two agricultural development projects in Northern Mozambique. International Fund for Agricultural Development (IFAD).
4. **Collins A. E.** Programa de Aumento da Comercialização das Associações (PACA) (Increase Association Commerce Programme) Baseline survey of Association Members and Associations, Programa de Apoio aos Mercados Agrícolas (PAMA), UMOKAZI and CARE.
5. **Collins, A. E.** Conhecimentos, Atitudes e Práticas (Knowledge, Attitudes and Practice survey) das Comunidades em Relação à Água, Saneamento e Higiene, nos Distritos de Chinde, Inhassunge, Lugela e Nicoadala na Zambézia. Baseline Survey for Ministry of Public Works and Habitation, Water Aid, UNICEF, Agema Consultoria Lda.
6. **Collins, A. E.** Monitoring and Evaluation (M&E) and Management Information Systems (MIS) for the outsourced extension programme, Zambézia, for Sistema Nacional de Extensão Rural, Ministério da Agricultura e Desenvolvimento Rural, República de Moçambique; commissioned by Agema Consultoria Lda.

2003

1. **Collins, A. E.** North Coast Rural Support Programme Baseline Survey, Mozambique for The Aga Khan Foundation.
2. **Collins, A. E.** Hazard and Sustainable Development Awareness via Radio Broadcast in Zambezia, Mozambique, 2003 Survey and set of data. Prepared for World Vision, Radio Mozambique and ZADP.
3. **Collins, A. E.** South-South Cooperation Project; Special Program for Food Security UTF/MOZ/068/MOZ Baseline Survey for Africa Development Bank (ADB), Food and Agriculture Organization (FAO) and Agema Consultoria Lda.
4. Williams, L. and **Collins, A. E.** Infectious Disease Risk Management (IDRM). Baseline Survey of Beira, for Ministry of Health, Mozambique. (DFID, WHO, UNICEF)

funded)

2002

1. **Collins, A.E.** and Lucas, M. 'O Que Aconteceu?' (What happened) Report on environmental health preparedness, response and lessons learnt from recent flooding emergency in Mozambique for Ministry of Health, Government of Mozambique.
2. **Collins, A. E.** Year four baseline update survey, Prepared for Department for International Development (DfID), Government of Mozambique, and Zambezia Agricultural Development Project.
3. **Collins, A.E.** Hazard and Sustainable Development Awareness via Radio Broadcast in Zambezia, Mozambique, 2002 Baseline Survey Update and full set of data. Prepared for Mediae Company, Radio Mozambique and ZADP.
4. **Collins, A. E.** Feasibility study for hazard and sustainable development broadcast in Sudan, for Mediae Company, Trocaire, and DFID.

2001

1. **Collins, A.E.** Hazard and Sustainable Development Awareness via Radio Broadcast in Zambezia, Mozambique, Baseline Survey report and full set of data. Prepared for Mediae Company, Radio Mozambique and ZADP.

2000

1. **Collins, A.E.** Review of ZADP II Monitoring and Evaluation systems. Report prepared for Department for International Development (DfID), Government of Mozambique and World Vision.
2. **Collins, A.E.** (2000) ZADP Baseline Survey Update and Evaluation of Change in Food and Livelihood Security in Zambezia. Prepared for Department for International Development (DfID), Government of Mozambique and World Vision.

1999

1. **Collins, A.E.** Evaluation of existing data for ZADP monitoring. Report prepared for Department for International Development (DfID), Government of Mozambique and World Vision.
2. **Collins, A.E.** Establishing ZADP Monitoring and Evaluation (M+E) in the Provincial Department of Agriculture and Fisheries (Direcção Provincial de Agricultura e Pesca, Zambézia, Report prepared for Department for International Development (DfID),

Government of Mozambique and World Vision.

3. **Collins, A.E.** Developing GIS capacity in surveillance to improve malaria prevention and control in Mozambique. Report prepared for Environmental Health Project (EHP) - USAID and Mozambique Ministry of Health.
4. **Collins, A.E.** Zambézia Agricultural Development Project (ZADP) *Monitoring and Evaluation Unit Manual*, prepared for Department for International Development (DfID), Government of Mozambique and World Vision.

1998

1. Wijeyaratne, P., Bretas, G. and **Collins, A.E.** GIS capacity in surveillance to improve malaria prevention and control in Mozambique. Report prepared for Environmental Health Project (EHP), USAID.
2. **Collins, A.E.** Zambézia Agricultural Development Project (ZADP) *Project Baseline Survey*. Assessment of food and livelihood security in Zambézia for Department for International Development (DfID), Government of Mozambique and World Vision. Includes 30 tables of data.

1996

1. **Collins, A.E.** The role of GPS in environmental health management: perspectives from diarrhoeal disease research in Mozambique. Report prepared for the Natural Environment Research Council (NERC).

Examples of published book reviews:

2008

1. **Collins, A. E.** *Book review:* Ohta, I. and Gebre, Y.S. (eds.)(2007) *Displacement Risks in Africa: Refugees, Resettlers and their Host Population*, Kyoto University Press, in *Journal of Mass Emergencies and Disasters*, 26:3, pp. 128-32.

2007

1. **Collins, A.E.** *Book review:* Few, R. and Matthies (eds.) (2006) *Flood Hazards and Health: Responding to present and future risks*, Earthscan, London, in *Journal of Risk Research*.

2006

1. **Collins, A.E.** *Book reviews:* Briggs, C.L. and Mantini-Briggs, C. (2003) *Stories in*

the Time of Cholera, The University of California Press, California, in *Social Science and Medicine* 62, p. 523.

2004

1. **Collins, A.E.** *Book review:* Gray, A. (2001) *World Health and Disease*, Health and Disease Series, third ed., Open University Press, in *Health and Place* 10, pp. 393-4.

2000

1. **Collins, A. E.** *Book review:* Honari, M. and Boleyn, T. (1999)(eds.) *Health Ecology: Health, Culture and Human-Environment Interaction*, Routledge, London, in *Health and Place* 6:1, p. 63.

Progress and prospect for *action data* in people centred disaster risk reduction

Andrew Collins

Disaster and Development Network, Department of Geography and Environmental Sciences,
Northumbria University, United Kingdom, NE18ST

The role of data in risk reduction related practices, such as early warning, forecasting and gaming of future disaster events has limitations due to increasingly recognised complexity of natural and human systems in generating risk environments. Further, in an era of exponentially more data being generated, speeded up processes of data management, artificial intelligence for data application, together with the threat of misrepresentation or fake data, will data initiatives sufficiently achieve disaster risk reduction and resilience?

In this presentation I will explore how and why data has often been more actionable for disaster risk reduction and response through shifts towards people centric approaches. Examples are drawn from some of the work I have been a part of for many years, aimed at enabling solution design for risk reduction in society, where data is a part of what is needed. This is generally grounded research that has attempted to increase focus on hazard and vulnerability mitigation through, for example, health and well-being and educational drivers of community engagement in early warning, risk and recovery management. The confluence of this work confirms that even in conditions of marginalisation people can control ecological and socio-economic risks where these are better understood within local context, and whereby self-organisation is supported by appropriate risk governance. DRR progresses or deteriorates without knowing all parameters of disaster risk.

Use of action data as part of multilateral forms of DRR includes engaging in emergency conservation and enhancement of environmental, economic and social care. However, this requires transitions from linear supply driven versions of understanding risk towards ongoing discovery of unique solutions for unique times, places and people who urgently need sustainable DRR solutions. The findings from this work therefore emphasises the need for a broad definition of data information in actionable DRR. Addressing DRR to achieve planetary sustainability necessitates ongoing reconceptualization of appropriate engagements with: i) data lacunas associated with the uncertainty of everyday lives of at risk people, ii) nuances of representation, communication and interpretation, iii) the effects of disengagement with critical data based information, and iv) the manipulated data of hegemony, where these are contrary to the principles of equity, self-reliance and prevention that are needed in DRR and response.

Whilst much progress in DRR science and technology can be referred to in our current era, it is suggested through this presentation that we are yet to witness the breakthrough needed across the range of interconnected sectors that greater emphasis on 'action data' could facilitate. Some suggestions for ways forward are offered for enhanced data engagement awareness and application in disaster risk reduction. With no limits to multiple types of further investment, there is the possibility to use the opportunity of action data and associated approaches to orientate and drive more impactful DRR science, policy and practice at all levels.

DPRI AWARD 2020



The Disaster Prevention Research Institute, Kyoto University

Awarded on February 20, 2020