Malawi Open NAP

This manuscript (permalink) was automatically generated from desanker/malawi@8d58f57 on May 13, 2020.

Authors

- **Malawi NAP Team**
  XXXX-XXXX-XXXX-XXXX · desanker · xx
  Government of Malawi

- **LDC Expert Group**
  XXXX-XXXX-XXXX-XXXX · desanker · xx
  UNFCCC

Abstract

The National Adaptation Plan for Malawi has been developed under the Open NAP Initiative based a country-driven and country-owned approach involve a wide-range of stakeholders from different entities in Malawi, building on equally participatory outputs that exist to support the national approach for adaptation. Malawi has participated in many adaptation initiatives for the last 20 years, both under the UNFCCC as well as through bilateral and national programmes. The NAP is thus not just another planning process, but rather an umbrella adaptation programme for the country, embracing all past and on-going adaptation initiatives. A notable contribution to this NAP are the outputs of a recently formulated SPCR under the World Bank's PPCR, which followed all internationally recognized standards of participation, gender responsiveness, country ownership and basis on best available science, to name a few. The PPCR programme came to a halt for Malawi soon after the SPCR, thus making the SPCR an orphan plan/stranded plan. The five major programmes proposed under the PPCR are sufficient to comprose a NAP, however, several other systems and priorities have been considered to supplement, and produce the current NAP.

The NAP embraces an iterative approach, with updates to be incorporated as things change and new assessments warrant it. This is accomplished by creating a "living document", with continuing assessments that can be integrated into the NAP at any time, subject to approval by the National NAP governance structure. The NAP is developed based on the guidelines agreed under the UNFCCC as expanded in the NAP Technical Guidelines, and is fully responsive to all the guiding principles outlined by the UNFCCC and further reinforced in Articles of the Paris Agreement.

The NAP will serve as an umbrella national adaptation programme, and as the source of input in the update to the NDC in 2020, along with an Adaptation Communication that will also be submitted to the Paris Agreement. The priority programmes agreed to in the NAP will be integrated into the GCF 5-year Country Programme, as well as a broader implementation strategy for adaptation at the country level through national, bilateral and other sources of funding.

As an umbrella programme for adaptation for the country, the NAP will integrate assessments carried out by different actors and will present outputs that can be used and serve the needs of the actors in their subsequent work on adaptation for Malawi. These include:

- Government-led efforts including in accessing financing from the UNFCCC funds (GCF, GEF, AF, LDCF);
- Efforts supported through bilateral support to government or non-governmental entities;
- Efforts under the PPCR;
- Efforts supported through non-governmental organizations or the private sector;
- Efforts that would be part of regional and global activities;
- Efforts in updating the NDC and in preparing an adaptation communication to the Paris Agreemen.

The NAP also presents a set of adaptation goals, objectives and targets, along with iindicators, in aggregate for the country, as well as for key systems.

To continue the assessments underpinning the formulation of adaptation plans in the country, Malawi has recently accessed the GCF Readiness Support Programme to further advance the NAP process. Outputs form this project, when ready. will be integrated into updates and revisions of the NAP.

Main references for the Malawi Open NAP

Aragie, Emerta, Karl Pauw, and Valentina Pernechele. "Achieving Food Security and Industrial Development in Malawi: Are Export Restrictions the Solution?" World Development 108 (August 2018):

1–15. https://doi.org/10.1016/j.worlddev.2018.03.020.

Hughes, Nigel Ross, Simon Croxton, and Louise E. M. Croneborg. “Malawi Country Environmental Analysis.” The World Bank, January 1, 2019. http://documents.worldbank.org/curated/en/508561550587004266/Malawi-Country-Environmental-Analysis.

Meerman, Janice; Aberman, Noora-Lisa; Harris, Jody; and Pauw, Karl. 2018. Indicators for examining links between agriculture, food security, and nutrition. In Agriculture, food security, and nutrition in Malawi: Leveraging the links, eds. Noora-Lisa Aberman, Janice Meerman, and Todd Benson. Chapter 2, Pp. 17-29. Washington, D.C.: International Food Policy Research Institute (IFPRI). https://doi.org/10.2499/9780896292864_02

Hurford, A.P., S.D. Wade, and J. Winpenny. “Malawi Case Study: Harnessing Hydropower.” Evidence on Demand, December 2014. https://doi.org/10.12774/eod_cr.september2014.hurfordaetal04.

Malawi, and Environmental Affairs Department. National Climate Change Management Policy, 2016.

Kaluma, Felix N. D., Stephen K. Machira, Patrick C. Kamwendo, and Malawi, eds. National Environmental Action Plan. Lilongwe: Malawi, Dept. of Research and Environmental Affairs, 1994.

Malawi, ed. The Second National Communication of the Republic of Malawi under the Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC). Lilongwe, Malawi: Ministry of Natural Resources, Energy and Environment, 2011.

Global Open NAP references

Ahmed, Mahfuzuddin, and Suphachol Suphachalasai. Assessing the Costs of Climate Change and Adaptation in South Asia. Mandaluyong City, Metro Manila, Philippines: Asian Development Bank : UK Aid, 2014.

Bailey, Rob, and Laura Wellesley. Chokepoints and Vulnerabilities in Global Food Trade. Place of publication not identified: Wellesley Institute, 2017. https://deslibris.ca/ID/10091331.

Balcan, Duygu, Bruno Gonçalves, Hao Hu, José J. Ramasco, Vittoria Colizza, and Alessandro Vespignani. “Modeling the Spatial Spread of Infectious Diseases: The GLobal Epidemic and Mobility Computational Model.” Journal of Computational Science 1, no. 3 (August 2010): 132–45. https://doi.org/10.1016/j.jocs.2010.07.002.

Bingham, Heather C., Diego Juffe Bignoli, Edward Lewis, Brian MacSharry, Neil D. Burgess, Piero Visconti, Marine Deguignet, et al. “Sixty Years of Tracking Conservation Progress Using the World Database on Protected Areas.” Nature Ecology & Evolution 3, no. 5 (May 2019): 737–43. https://doi.org/10.1038/s41559-019-0869-3.

Bruijn, Jens A. de, Hans de Moel, Brenden Jongman, Marleen C. de Ruiter, Jurjen Wagemaker, and Jeroen C. J. H. Aerts. “A Global Database of Historic and Real-Time Flood Events Based on Social Media.” Scientific Data 6, no. 1 (December 2019): 311. https://doi.org/10.1038/s41597-019-0326-9.

Bruijn, Jens A. de, Hans de Moel, Brenden Jongman, Jurjen Wagemaker, and Jeroen C. J. H. Aerts. “TAGGS: Grouping Tweets to Improve Global Geoparsing for Disaster Response.” Journal of Geovisualization and Spatial Analysis 2, no. 1 (June 2018): 2. https://doi.org/10.1007/s41651-017-0010-6.

Chinazzi, Matteo, Jessica T. Davis, Marco Ajelli, Corrado Gioannini, Maria Litvinova, Stefano Merler, Ana Pastore y Piontti, et al. “The Effect of Travel Restrictions on the Spread of the 2019 Novel Coronavirus (COVID-19) Outbreak.” Science, March 6, 2020, eaba9757. https://doi.org/10.1126/science.aba9757.

Committee on Analytical Research Foundations for the Next-Generation Electric Grid, Board on Mathematical Sciences and Their Applications, Division on Engineering and Physical Sciences, and National Academies of Sciences, Engineering, and Medicine. Analytic Research Foundations for the Next-Generation Electric Grid. Washington, D.C.: National Academies Press, 2016. https://doi.org/10.17226/21919.

Committee on Building Adaptable and Resilient Supply Chains After Hurricanes Harvey, Irma, and Maria, Office of Special Projects, Policy and Global Affairs, and National Academies of Sciences, Engineering, and Medicine. Strengthening Post-Hurricane Supply Chain Resilience: Observations from Hurricanes Harvey, Irma, and Maria. Washington, D.C.: National Academies Press, 2020. https://doi.org/10.17226/25490.

Committee on Enhancing the Resilience of the Nation’s Electric Power Transmission and Distribution System, Board on Energy and Environmental Systems, Division on Engineering and Physical Sciences, and National Academies of Sciences, Engineering, and Medicine. Enhancing the Resilience of the Nation’s Electricity System. Washington, D.C.: National Academies Press, 2017. https://doi.org/10.17226/24836.

Do, Hong Xuan, Lukas Gudmundsson, Michael Leonard, and Seth Westra. “The Global Streamflow Indices and Metadata Archive (GSIM) – Part 1: The Production of a Daily Streamflow Archive and Metadata.” Earth System Science Data 10, no. 2 (April 17, 2018): 765–85. https://doi.org/10.5194/essd-10-765-2018.

Dottori, Francesco, Peter Salamon, Alessandra Bianchi, Lorenzo Alfieri, Feyera Aga Hirpa, and Luc Feyen. “Development and Evaluation of a Framework for Global Flood Hazard Mapping.” Advances in Water Resources 94 (August 2016): 87–102. https://doi.org/10.1016/j.advwatres.2016.05.002.

Driscoll, Don A., Lucie M. Bland, Brett A. Bryan, Thomas M. Newsome, Emily Nicholson, Euan G. Ritchie, and Tim S. Doherty. “A Biodiversity-Crisis Hierarchy to Evaluate and Refine Conservation Indicators.” Nature Ecology & Evolution 2, no. 5 (May 2018): 775–81. https://doi.org/10.1038/s41559-018-0504-8.

Dryden, Rachel. “Estimating the Physical Exposure of Human Population and Agriculture to In-Land Flooding at Regional and Global Scales,” n.d., 107.

Eckstein, David, Vera Künzel, Laura Schäfer, and Germanwatch. Global Climate Risk Index 2018 Who Suffers Most From Extreme Weather Events? Weather-Related Loss Events in 2016 and 1997 to 2016, 2017.

Endo, Aiko, Izumi Tsurita, Kimberly Burnett, and Pedcris M. Orencio. “A Review of the Current State of Research on the Water, Energy, and Food Nexus.” Journal of Hydrology: Regional Studies 11 (June 2017): 20–30. https://doi.org/10.1016/j.ejrh.2015.11.010.

Friel, Sharon, Ashley Schram, and Belinda Townsend. “The Nexus between International Trade, Food Systems, Malnutrition and Climate Change.” Nature Food 1, no. 1 (January 2020): 51–58. https://doi.org/10.1038/s43016-019-0014-0.

Fritz, Steffen, Linda See, Tyler Carlson, Mordechai Haklay, Jessie L. Oliver, Dilek Fraisl, Rosy Mondardini, et al. “Citizen Science and the United Nations Sustainable Development Goals.” Nature

Sustainability 2, no. 10 (October 2019): 922–30. https://doi.org/10.1038/s41893-019-0390-3.

Gaupp, Franziska, Jim Hall, Stefan Hochrainer-Stigler, and Simon Dadson. “Changing Risks of Simultaneous Global Breadbasket Failure.” Nature Climate Change 10, no. 1 (January 2020): 54–57. https://doi.org/10.1038/s41558-019-0600-z.

Gerten, Dieter, Vera Heck, Jonas Jägermeyr, Benjamin Leon Bodirsky, Ingo Fetzer, Mika Jalava, Matti Kummu, et al. “Feeding Ten Billion People Is Possible within Four Terrestrial Planetary Boundaries.” Nature Sustainability 3, no. 3 (March 2020): 200–208. https://doi.org/10.1038/s41893-019-0465-1.

Glanemann, Nicole, Sven N. Willner, and Anders Levermann. “Paris Climate Agreement Passes the Cost-Benefit Test.” Nature Communications 11, no. 1 (December 2020): 110. https://doi.org/10.1038/s41467-019-13961-1.

Halpern, Benjamin S., Catherine Longo, Darren Hardy, Karen L. McLeod, Jameal F. Samhouri, Steven K. Katona, Kristin Kleisner, et al. “An Index to Assess the Health and Benefits of the Global Ocean.” Nature 488, no. 7413 (August 2012): 615–20. https://doi.org/10.1038/nature11397.

Heslin, Alison, Michael J. Puma, Philippe Marchand, Joel A. Carr, Jampel Dell’Angelo, Paolo D’Odorico, Jessica A. Gephart, et al. “Simulating the Cascading Effects of an Extreme Agricultural Production Shock: Global Implications of a Contemporary US Dust Bowl Event.” Frontiers in Sustainable Food Systems 4 (March 20, 2020): 26. https://doi.org/10.3389/fsufs.2020.00026.

Hubau, Wannes, Simon L. Lewis, Oliver L. Phillips, Kofi Affum-Baffoe, Hans Beeckman, Aida Cuní-Sanchez, Armandu K. Daniels, et al. “Asynchronous Carbon Sink Saturation in African and Amazonian Tropical Forests.” Nature 579, no. 7797 (March 2020): 80–87. https://doi.org/10.1038/s41586-020-2035-0.

Hynard, James, and Tom Rodger. “David King, Daniel Schrag, Zhou Dadi, Qi Ye and Arunabha Ghosh.” CLIMATE CHANGE, n.d., 79. Ilieva, Rositsa T., and Timon McPhearson. “Social-Media Data for Urban Sustainability.” Nature Sustainability 1, no. 10 (October 2018): 553–65. https://doi.org/10.1038/s41893-018-0153-6.

Janetos, Anthony, Christopher Justice, Molly Jahn, Michael Obersteiner, Joseph Glauber, and William Mulhern. “The Risks of Multiple Breadbasket Failures in the 21st Century: A Science Research Agenda,” 2017, 28.

Jongman, Brenden, Philip J. Ward, and Jeroen C.J.H. Aerts. “Global Exposure to River and Coastal Flooding: Long Term Trends and Changes.” Global Environmental Change 22, no. 4 (October 2012): 823–35. https://doi.org/10.1016/j.gloenvcha.2012.07.004.

Knittel, Nina, Martin W. Jury, Birgit Bednar-Friedl, Gabriel Bachner, and Andrea K. Steiner. “A Global Analysis of Heat-Related Labour Productivity Losses under Climate Change—Implications for Germany’s Foreign Trade.” Climatic Change, February 3, 2020. https://doi.org/10.1007/s10584-020-02661-1.

Liu, Jianguo, Vanessa Hull, H. Charles J. Godfray, David Tilman, Peter Gleick, Holger Hoff, Claudia Pahl-Wostl, et al. “Nexus Approaches to Global Sustainable Development.” Nature Sustainability 1, no. 9 (September 2018): 466–76. https://doi.org/10.1038/s41893-018-0135-8.

Mastrángelo, Matías E., Natalia Pérez-Harguindeguy, Lucas Enrico, Elena Bennett, Sandra Lavorel, Graeme S. Cumming, Dilini Abeygunawardane, et al. “Key Knowledge Gaps to Achieve Global

Sustainability Goals.” Nature Sustainability 2, no. 12 (December 2019): 1115–21. https://doi.org/10.1038/s41893-019-0412-1.

Murti, Edited Radhika, and Camille Buyck. “Protected Areas for Disaster Risk Reduction and Climate Change Adaptation,” n.d., 183.

Nesheim, Malden C, Maria Oria, and Peggy Tsai Yih. “Board on Agriculture and Natural Resources,” n.d., 445.

Persson, Åsa. “Supplementary Information,” n.d., 22.

Ray, Deepak K., James S. Gerber, Graham K. MacDonald, and Paul C. West. “Climate Variation Explains a Third of Global Crop Yield Variability.” Nature Communications 6, no. 1 (May 2015): 5989. https://doi.org/10.1038/ncomms6989.

Ray, Deepak K., Paul C. West, Michael Clark, James S. Gerber, Alexander V. Prishchepov, and Snigdhansu Chatterjee. “Climate Change Has Likely Already Affected Global Food Production.” Edited by Young Hoon Jung. PLOS ONE 14, no. 5 (May 31, 2019): e0217148. https://doi.org/10.1371/journal.pone.0217148.

Sachs, Jeffrey D., Guido Schmidt-Traub, Mariana Mazzucato, Dirk Messner, Nebojsa Nakicenovic, and Johan Rockström. “Six Transformations to Achieve the Sustainable Development Goals.” Nature Sustainability 2, no. 9 (September 2019): 805–14. https://doi.org/10.1038/s41893-019-0352-9.

Sampson, Christopher C., Andrew M. Smith, Paul D. Bates, Jeffrey C. Neal, Lorenzo Alfieri, and Jim E. Freer. “A High-Resolution Global Flood Hazard Model: A HIGH-RESOLUTION GLOBAL FLOOD HAZARD MODEL.” Water Resources Research 51, no. 9 (September 2015): 7358–81. https://doi.org/10.1002/2015WR016954.

Sippel, Sebastian, Nicolai Meinshausen, Erich M. Fischer, Enikő Székely, and Reto Knutti. “Climate Change Now Detectable from Any Single Day of Weather at Global Scale.” Nature Climate Change 10, no. 1 (January 2020): 35–41. https://doi.org/10.1038/s41558-019-0666-7.

Sterling, Eleanor J., Christopher Filardi, Anne Toomey, Amanda Sigouin, Erin Betley, Nadav Gazit, Jennifer Newell, et al. “Biocultural Approaches to Well-Being and Sustainability Indicators across Scales.” Nature Ecology & Evolution 1, no. 12 (December 2017): 1798–1806. https://doi.org/10.1038/s41559-017-0349-6.

Vervoort, Joost M., Philip K. Thornton, Patti Kristjanson, Wiebke Förch, Polly J. Ericksen, Kasper Kok, John S.I. Ingram, et al. “Challenges to Scenario-Guided Adaptive Action on Food Security under Climate Change.” Global Environmental Change 28 (September 2014): 383–94. https://doi.org/10.1016/j.gloenvcha.2014.03.001.

Ward, Philip J, Brenden Jongman, Frederiek Sperna Weiland, Arno Bouwman, Rens van Beek, Marc F P Bierkens, Willem Ligtvoet, and Hessel C Winsemius. “Assessing Flood Risk at the Global Scale: Model Setup, Results, and Sensitivity.” Environmental Research Letters 8, no. 4 (December 1, 2013): 044019. https://doi.org/10.1088/1748-9326/8/4/044019.

Winsemius, H. C., L. P. H. Van Beek, B. Jongman, P. J. Ward, and A. Bouwman. “A Framework for Global River Flood Risk Assessments.” Hydrology and Earth System Sciences 17, no. 5 (May 21, 2013): 1871–92. https://doi.org/10.5194/hess-17-1871-2013.

Winsemius, Hessel C., Jeroen C. J. H. Aerts, Ludovicus P. H. van Beek, Marc F. P. Bierkens, Arno Bouwman, Brenden Jongman, Jaap C. J. Kwadijk, et al. “Global Drivers of Future River Flood Risk.” Nature Climate Change 6, no. 4 (April 2016): 381–85. https://doi.org/10.1038/nclimate2893.

Winsemius, Hessel C., Brenden Jongman, Ted I.E. Veldkamp, Stephane Hallegatte, Mook Bangalore, and Philip J. Ward. “Disaster Risk, Climate Change, and Poverty: Assessing the Global Exposure of Poor People to Floods and Droughts.” Environment and Development Economics 23, no. 3 (June 2018): 328–48. https://doi.org/10.1017/S1355770X17000444.

Zhang, Lyubing, Eric I. Ameca, Guy Cowlishaw, Nathalie Pettorelli, Wendy Foden, and Georgina M. Mace. “Global Assessment of Primate Vulnerability to Extreme Climatic Events.” Nature Climate Change 9, no. 7 (July 2019): 554–61. https://doi.org/10.1038/s41558-019-0508-7.

References