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Uncovering smallholder heterogeneity

An analysis of diverging livelihood trajectories and outcomes of engagement in tree-crop value chains in Ghana

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References



References

- Abdulai, I., Hoffmann, M.P., Jassogne, L., Asare, R., Graefe, S., Tao, H.H., ... & Rötter, R. P. 2020. Variations in yield gaps of smallholder cocoa systems and the main determining factors along a climate gradient in Ghana. *Agricultural Systems*, 181, 102812. <https://doi.org/10.1016/j.agsy.2020.102812>.
- Abdulsamad A., & Mason, H. 2019. Public-private partnerships in global value chains. In: Ponte, S., Gereffi, G., Raj-Reichert, G. (eds): *Handbook on global value chains*, Cheltenham, UK: Edward Elgar Publishing Limited, pp. 537—554.
- Adjei-Nsiah, S., Sakyi-Dawson, O., & Kuyper, T.W. 2012. Exploring opportunities for enhancing innovation in agriculture: The case of oil palm production in Ghana. *Journal of Agricultural Science*, 4: 212—223. <https://doi.10.5539/jas.v4n10p212>.
- Adu-Gyamfi, S., Donkoh, W.J., & Addo, A.A. 2016. Education reforms in Ghana: Past and present. *Journal of Education and Human Development*, 5(3): 158—172. <https://doi.10.15640/jehd.v5n3a17>.
- AFAP (African Fertilizer and Agribusiness Partnership). 2022. *Country story-Ghana impact of COVID-19 on agriculture in Ghana and AFAP's activities*. <https://afap-partnership.org/country-story-ghana-impact-of-covid-19-on-agriculture-in-ghana-and-afaps-activities>. (Accessed 8 January 2023).
- Afele, J.T., Ansah, E.G., Nimo, E., Blankson, S.S., Gorleku, D.O., Tiekou, E.O., Gyeniaw, C.Y., Osei Hene, M., & Olanrewaju, B.R. 2022. COVID-19, agriculture and food security in Ghana; The way forward. *Ghana Journal of Science, Technology and Development*, 8(2): 147—159. <https://doi.org/10.47881/342.967x>.
- Akram-Lodhi, A.H. 2015. Accelerating towards food sovereignty. *Third World Quarterly*, 36: 563—583. <https://doi.org/10.1080/01436597.2015.1002989>.
- Akuriba, G.A., & Tangonyire, D.F. 2020. Effects of nucleus-farmer outgrower schemes on profitability among smallholder farmers: Empirical evidence from Northern Ghana. *Cogent Food & Agriculture*, 6 (1): 1823592, pp. 1—20. <https://doi.10.1080/23311932.2020.1823592>.
- Alabi, J., Alabi, G., & Ahiawodzi, A. 2007. Effects of susu – a traditional micro-finance mechanism on organized and unorganized micro and small enterprises (MSEs) in Ghana. *African Journal of Business Management*, 1(8): 201—208. <https://doi.org/10.5897/AJBM.9000243>.
- Alford, M., Barrientos, S., & Visser, M. 2017. Multi-scalar labour agency in global production networks: Contestation and crisis in the South African fruit sector. *Development and Change* 48(4): 721—745. <https://doi.10.1111/dech.12317>.
- Alobo-Loison, S. 2015. Rural livelihood diversification in sub-Saharan Africa: a literature review. *The Journal of Development Studies*, 51: 1125—1138. <https://doi.org/10.1080/00220388.2015.1046445>.
- Alonso-Fradejas, A., Borrás Jr, S.M., Holmes, T., Holt-Giménez, E. & Robbins, M.J. 2015. Food sovereignty: convergence and contradictions, conditions and challenges. *Third World Quarterly*, 36(3): 431—448. <https://doi.10.1080/01436597.2015.1023567>.

- Altieri, M.A. 2009. Agro-ecology, small farms, and food sovereignty. *Monthly Review* 61(3): 102—113. https://doi.10.14452/MR-061-03-2009-07_8.
- Amanor, K. 2008. *The changing face of customary land tenure*. In J.M. Ubink & K. S. Amanor (eds) 2008 *Contesting land and custom in Ghana. State, Chief and the Citizen*. Leiden University Press, 55—80.
- Amanor, K., & Diderutuah, M.K. 2001. *Share contracts in the oil palm and citrus belt of Ghana*. London: IIED, London, UK.
- Ameyaw, L.K., Ettl, G.J., Leissle, K., & Anim-Kwapong, G.J. 2018. Cocoa and climate change: Insights from smallholder cocoa producers in Ghana regarding challenges in implementing climate change mitigation strategies. *Forests* 9(12), 742. <https://doi.org/10.3390/f9120742>.
- Amfo, B., & Ali, E.B. 2020. Climate change coping and adaptation strategies: how do cocoa farmers in Ghana diversify farm income? *Forest Policy and Economics*, 119, 102265. <https://doi.org/10.1016/j.agry.2021.103172>.
- Amuzu, D., Neimark, B., & Kull, C. 2022. Bittersweet cocoa: Certification programmes in Ghana as battlegrounds for power, authority and legitimacy. *Geoforum*, 136 (2022): 54—67. <https://doi.10.1016/j.geoforum.2022.08.002>.
- Anderman, T.L., Remans, R., Wood, S.A., DeRosa, K., & DeFries, R. 2014. Synergies and trade-offs between cash crop production and food security: a case study in rural Ghana. *Food Security*, 6: 541—554. <https://doi.org/10.1007/s12571-014-0360-6>.
- Angelucci, F. 2013. *Analysis of incentives and disincentives for palm oil in Ghana*. Technical notes series, MAFAP, FAO, and Rome.
- Aneani, A., Owusu-Ansah, F., & Asamoah, M. 2011. An analysis of the extent and determinants of crop diversification by cocoa (*Theobroma cacao*) farmers in Ghana. *African Journal of Agricultural Research*, 6: 4277—4287. <https://doi.10.5897/AJAR10.1083>.
- Ansell, N., Hajdu, F., van Blerk, L., & Robson, E. 2014. Reconceptualising temporality in young lives: exploring young people's current and future livelihoods in AIDS-affected southern Africa. *Transactions*, 39: 387—401. <https://doi.10.1111/tran.12041>.
- Arias, P., Hallam, D., Krivonos, E., & Morrison, J. 2013. *Smallholder integration in changing food markets*. Food and Agriculture Organization of the United Nations Rome, 2013. <https://www.fao.org/sustainable-food-value-chains/library/details/en/c/265788/>. (Accessed 8 June 2016).
- Asaaga, F.A., & Hiron, M.A. 2019. Windows of opportunity or windows of exclusion? Changing dynamics of tenurial relations in rural Ghana. *Land Use Policy*, 87, 104042. <https://doi.org/10.1016/j.landusepol.2019.104042>.
- Asamoah, M., & Owusu-Ansah, F. 2017. *Report on land tenure and cocoa production in Ghana*. A CRIG/WCF Collaborative Survey, February 2017. https://www.worldcocoafoundation.org/wpcontent/uploads/files_mf/1492612620CRIGLandTenureSurveyFinal41217.pdf. (Accessed 17 May 2021)
- Asante, E.A. 2012. *The case of Ghana's President's Special Initiative on Oil Palm*. DIIS working paper 2012:11. Pp 1—34. <https://www.jstor.org/stable/resrep13372>. (Accessed 5 June 2017).

- Asante, K.T. 2021. Political economy of the oil palm industry in Ghana. *Agricultural Policy Research in Africa (APRA)*, Working Paper 054, pp 1—34. Brighton: Future Agricultures Consortium. <https://doi.10.19088/APRA.2021.008>.
- Asante-Poku, A., & Angelucci, F. 2013. *Analysis of incentives and disincentives for cocoa in Ghana*. Technical notes series, MAFAP, FAO, Rome.
- Ashraf, N., Giné, X., & Karlan, D. 2009. Finding missing markets (and a disturbing epilogue): Evidence from an export crop adoption and marketing intervention in Kenya. *American Journal of Agricultural Economics*, 91(4): 973—990. <https://doi.10.1111/j.1467-8276.2009.01319.x>.
- Asubonteng, K., Pfeiffer, K., Ros-Tonen, M., Verbesselt, J., & Baud, I. 2018. Effects of tree crop farming on land-cover transitions in a mosaic landscape in the Eastern Region of Ghana. *Environmental Management*, 62: 529—547. <https://doi.org/10.1007/s00267-018-1060-3>.
- Ataa-Asantewaa, M., & Ros-Tonen, M.A.F. 2015. Diversity among Ghanaian tree crop farmers in the Eastern Region. https://inclusivevcc.files.wordpress.com/2015/07/wotro-inclusive-vcc-info-sheet-01_final-06112015.pdf. (Accessed 1 November 2016).
- Ataa-Asantewaa, M., Derkyi, M., Obeng-Ofori, D., & Ros-Tonen, M. 2016. Diversity among Ghanaian cocoa crop farmers in the Ahafo-Ano North District, Ashanti Region. <https://inclusivevcc.files.wordpress.com/2015/07/wotro-inclusive-vcc-info-sheet-03-diversity-among-ghanaian-cocoa-crop-farmers-in-the-ahafo-ano-north-district-ashanti-region.pdf>. (Accessed 8 August 2019).
- Asuming-Brempong, S., Al-Hassan, R., Sarpong, D.B., Kwadzo, G., T-M., Akoena, S.K.K., Sakyi-Dawson, O., Mensah-Bonsu, A., Amegashie, D.P.K., Egyir, I., & Ashley, S. 2004. *Poverty and Social Impact Analysis (PSIA) studies for Ghana: Economic transformation of the agricultural sector*. Report submitted in June 2004 by the Department of Agricultural Economics & Agribusiness, University of Ghana and Department of Economics, University of Ghana, with technical support from The IDL Group, U.K.
- Bagchi, D.K., Blaikie, P., Cameron, J., Chattopadhyay, M., Gyawali, N., & Seddon, D. 1998. Conceptual and methodological challenges in the study of livelihood trajectories: case studies in eastern India and western Nepal. *Journal of International Development*, 10: 453—468. [https://doi.org/10.1002/\(SICI\)1099-1328\(199806\)10:4<453::AID-JID538>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-1328(199806)10:4<453::AID-JID538>3.0.CO;2-Q).
- Barney, K. 2012. Land, livelihoods, and remittances. A political ecology of youth out-migration across the Lao–Thai Mekong Border. *Critical Asian Studies*, 44 (1): 57—83. <https://doi.10.1080/14672715.2012.644887>.
- Barrett, C.B. 2008. Smallholder market participation: Concepts and evidence from Eastern and Southern Africa. *Food Policy*, 33: 299—317. <https://doi.org/10.1016/j.foodpol.2007.005>.
- Barret, C.B. 2010. Measuring food insecurity. Perspective. *Science*, 327 (5967): 825—828. <https://doi.10.1126/science.1182768>.
- Barrett, C.B., Bachke, M.E., Bellemare, M.F., Michelson, H.C., Narayanan, S., & Walker, T.F. 2010. *Smallholder Participation in Agricultural Value Chains: Comparative Evidence from Three Continents*. Munich Personal RePEc Archive, MPRA Paper No. 27829. <http://mpra.ub.uni-muenchen.de/27829/>. (Accessed 8 August 2018).

- Barrett, C.B., Bachke, M.E., Bellemare, M.F., Michelson, H.C., Narayanan, S., & Walker, T. F. 2012. Smallholder participation in contract farming: comparative evidence from five countries. *World Development*, 40(4): 715—730. <https://doi.org/10.1016/j.worlddev.2011.09.006>.
- Barrett, B.C., Christiansen, L.D., Sheahan, M., & Shimeles, A. 2017. *On the structural transformation of rural Africa*. World Bank policy research working paper 7938. World Bank, Washington D.C.
- Barrientos, S. 2013. *Gender production networks: Sustaining cocoa-chocolate in Ghana and India*. Brooks World Poverty Institute Working Paper No. 186, Manchester: University of Manchester. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2278193. (Accessed 21 June 2014).
- Bassett T.J., Koné M., & Pavlovic N.R. 2018. Power relations and upgrading in the cashew value chain of Côte d'Ivoire. *Development and Change*, 49(5): 1223—1247. <https://doi.10.1111/dech.12400>.
- Batterbury, S. 2001. Landscapes of diversity: a local political ecology of livelihood diversification in South-Western Niger. *Ecumene*, 8: 437—464. <https://doi.org/10.1177/096746080100800404>.
- Bebbington, A., 1999. Capitals and capabilities: a framework for analysing peasant viability, rural livelihoods and poverty. *World Development*, 27(12): 2021—2044. [https://doi.org/10.1016/S0305-750X\(99\)00104-7](https://doi.org/10.1016/S0305-750X(99)00104-7).
- Berdegúe, J.A., Biénabe, E., & Peppelenbos, L., 2008. *Keys to inclusion of small-scale producers in dynamic markets – Innovative practice in connecting small-scale producers with dynamic markets*, Regoverning Markets Innovative Practice series, IIED, London.
- Betge, D. Lammers, E. Ros-Tonen, M., & de Winter, D. 2020. *Smallholders and food and nutritional security: Evidence from the Food and Business Research programme*. Synthesis paper, Dutch Food and Business Knowledge Platform, Dutch research Council I-WOTRO Science for Global Development, May 2020. https://ec.europa.eu/knowledge4policy/publication/smallholders-food-nutrition-security-evidence-food-business-research-programme_en. (Accessed 18 August 2020).
- Biddulph, R. & Amberntsson, P. 2016. Whose reality counts? Critical junctures in livelihood trajectories under deforestation. *Tijdschrift voor Economische en Sociale Geografie*, 108 (5): 540—553. <https://doi.10.1111/tesg.12214>.
- Birthal, P.S., Jha, A.K., & Singh H. 2007. Linking farmers to markets for high-value agricultural commodities. *Agricultural Economics Research Review*, 20: 425—439. <https://doi.10.22004/ag.econ.47437>.
- Bitzer, V., van Wijk, J., Helmsing, B., & van der Linden, V. 2009. *Partnering to facilitate smallholder inclusion in value chains*. Paper presented at the EADI Seminar “Promoting sustainable global value chains: the role of governance” held at the Maastricht School of Management, November 26, 2009.
- Bitzer, V. 2011. *Partnering for change in chains. On the capacity of partnerships to promote sustainable change in global agricultural commodity chains*. PhD Dissertation. Utrecht: University of Utrecht.
- Bitzer, V., Glasbergen, P., & Arts, B. 2013. Exploring the potential of intersectoral partnerships to improve the position of farmers in global agrifood chains: findings from the coffee sector in Peru. *Agriculture and Human Values*, 30: 5—20. <https://doi.org/10.1007/s10460-012-9372-z>.

- Bitzer, V., & Glasbergen, P. 2015. Business—NGO partnerships in global value chains: Part of the solution or part of the problem of sustainable change? *Current Opinion in Environmental Sustainability*, 12: 35—40. <https://doi.org/10.1016/j.cosust.2014.08.012>.
- Blaikie, N. 2003. *Analysing quantitative data: From description to explanation*. London, California, New Deli: Sage.
- Bilinsky, P. & Swindale, A. 2010. Months of adequate household food provisioning (MAHFP) for measurement of household food access: Indicator guide. Version 4, June 2010. Food and Nutrition Technical Assistance Project, Washington, DC.
- Boeije, H.R. 2009. *Analysis in qualitative research*, London, UK: Sage Publications Limited.
- Bolwig, S., Ponte, S., du Toit, A., Riisgaard, L., & Halberg, N. 2010. Integrating poverty and environmental concerns into value-chain analysis: A strategic framework and practical guide. *Development Policy Review*, 28(2): 195—216. <https://doi.org/10.1111/j.1467-7679.2010.00481.x>.
- Bonsi, R., Lamptey, S., & Beyuo, A. 2016. *Improving the development outcome of private-public partnerships in agriculture and the environment in Ghana*. United Nations Institute for Natural Resources in Africa (UN-INRA), draft report, March 2016.
- Booth, A. Sutton, A. & Papaioannou, D. 2016. *Systematic approaches to a successful literature review*. Second Edition. London: Sage.
- Botchwey, G. 2017. Public expectations in local governance: Unit Committees under Ghana's decentralised system. *Ghana Journal of Development Studies*, 14: 166—187. <https://doi.10.4314/gjds.v14i1.9>.
- Bourke, B. 2014. Positionality: Reflecting on the research process. *The Qualitative Report*, 19: 1—9. <http://nsuworks.nova.edu/tqr/vol19/iss33/3>. (Accessed 5 September 2019).
- Brako, D.E., Asare, R. & Gasparatos, A. 2021a. Do voluntary certification standards improve yields and wellbeing? Evidence from oil palm and cocoa smallholders in Ghana. *International Journal of Agricultural Sustainability*, 19(1): 16—39. <https://doi.10.1080/14735903.2020.1807893>.
- Brako D.E., Asare,R., & Gasparatos, A. 2021b. Sustainable but hungry? Food security outcomes of certification for cocoa and oil palm smallholders in Ghana. *Environmental Research Letters*, 16 (2021): 055001, pp.1—17. <https://doi.org/10.1088/1748-9326/abdf88>.
- Brouwer, I.D., McDermott, J., & Ruben, R. 2020. Food systems everywhere: Improving relevance in practice. *Global Food Security*, 26: 100398, pp 1—10. <https://doi.org/10.1016/j.gfs.2020.100398>.
- Bruni, M. & Santucci, F.M. 2016. Agribusiness at global scale and smallholders. *Bulgarian Journal of Agricultural Science*, 22: 1—9.
- Bryman, A. 2012. *Social research methods*. Fourth edition. Oxford University Press.
- Burnett, K., & Murphy, S. 2014. What place for international trade in food sovereignty? *Journal of Peasant Studies*, 41(6): 1065—1084. <https://doi.org/10.1080/03066150.2013.876995>.
- Bymolt, R., Laven, A., & Tyszler, M. 2018. *Demystifying the cocoa sector in Ghana and Côte d'Ivoire*. The Royal Tropical Institute (KIT). <https://www.kit.nl/project/demystifying-cocoa-sector/>. (Accessed 6 July 2019)

- Camarinha-Matos, L.M. & Afsarmanesh, H. 2006. *Collaborative networks. Value creation in a knowledge society*. In: K. Wang, G. Kovacs, M. Wozny & M. Fang (eds.) *Knowledge enterprise: Intelligent strategies in product design, manufacturing, and management*, Boston, MA, USA: Springer, pp. 26—40.
- Carney, D., Drinkwater, M., Rusinow, T., Neeffes, K., Wanmali, S & Singh, N. 1999. *Livelihoods Approaches Compared*. Department for International Development, London. <https://www.eldis.org/document/A28159>. (Accessed 16 June 2019).
- Carrere, R. 2010. *Oil palm in Africa: past, present and future scenarios*. WRM series on tree plantations, 15, 111. December 2010.
- Casson, M.C., Giusta, M.D., & Kambhampati, U.S. 2010. Formal and informal institutions and development. *World Development*, 38: 137—141. <https://doi.org/10.1016/j.worlddev.2009.10.008>.
- Castell, S., Rodrigo, P.G., de la Cruz, C., Ngo, J., & Javier, B.A. 2015. Household Food Insecurity Access Scale (HFIAS) *Nutrición Hospitalaria*, 31: 272—278. Grupo Aula Médica Madrid, España.
- Cavestro, L. 2003. *P.R.A.- Participatory Rural Appraisal: Concepts, methodologies and techniques*. Università Degli Studi Di Padova Facoltà Di Agraria Dipartimento Territorio E Sistemi Agro-Forestali, Master In Cooperazione Allo Sviluppo Nelle Aree Rural. 10 October 2003.
- CFI (Cocoa Forest Initiative). 2019. Cocoa and Forestry Initiative annual report Ghana 2019. May 2020. <https://www.idhsustainabletrade.com/publication/cocoa-forests-initiative-annual-report-ghana-2019/>. (Accessed 18 January 2022).
- Chamberlin, J. 2008. *It's a small world after all: Defining smallholder agriculture in Ghana*. Rome: IFPRI. <http://www.ifpri.org/publication/its-small-world-after-all?print>. (Accessed 3 May 2014).
- Chambers, R. 1989. Editorial introduction: Vulnerability, coping and policy. *IDS Bulletin* 20(2): 1—7. <https://doi.org/10.1111/j.1759-5436.1989.mp20002001.x>
- Chambers, R., & Conway, G.R. 1991. *Sustainable rural livelihoods: Practical concepts for the 21st century*. IDS Discussion Paper 296, Brighton: IDS. <http://opendocs.ids.ac.uk/opendocs/handle/123456789/80>. (Accessed 8 April 2017)
- Chigbu, U.E., Paradza, G., & Dachaga, W. 2019. Differentiations in women's land tenure experiences: Implications for women's land access and tenure security in sub-Saharan Africa. *Land*, 8(22): 1—21. <https://doi.org/10.3390/land8020022>.
- Coates, J., Swindale, A., & Bilinsky, P. 2007. *Household Food Insecurity Access Scale (HFIAS) for measurement of food access: Indicator guide*. Version 3. FANTA food and nutrition technical assistance. https://www.fantaproject.org/sites/default/files/resources/HFIAS_ENG_v3_Aug07.pdf. (Accessed 18 June 2019).
- Cobbinah, P.B., & Niminga-Beka, R. 2017. Urbanisation in Ghana: Residential land use under siege in Kumasi central. *Cities*, 60: 388—401. <https://doi.org/10.1016/j.cities.2016.10.011>.
- COCOBOD (Ghana Cocoa Board). 2019. 50th annual reports and consolidated financial statements. 30th September 2019, Accra, Ghana.
- COCOBOD (Ghana Cocoa Board). 2022a. Regional cocoa purchases. <https://cocobod.gh/cocoa-purchases>. (Accessed 15 November 2022).

- COCOBOD (Ghana Cocoa Board). 2022b. Cocoa. <https://cocobod.gh/pages/cocoa>. (Accessed 15 November 2022).
- COCOBOD (Ghana Cocoa Board). 2022c. Cocoa producer price goes up 21% to gh¢800 per bag. October 2022. <https://cocobod.gh/news/cocoa-producer-price-goes-up-21-to-gh800-per-bag>. (Accessed 15 November 2022).
- Cocoa Barometer 2020. Necessary farm gate price for living income. Existing living income reference prices are too low. Consultation paper for the 2020 Cocoa Barometer/ January 2020. <https://www.voicenetwork.eu/wp-content/uploads/2020/01/200113-Necessary-Farm-Gate-Prices-for-a-Living-Income-Definitive.pdf>. (Accessed 20 August 2020).
- Coe, N.M, Dicken, P., & Hess, M. 2008. Global production networks: realizing the potential. *Journal of Economic Geography*, 8: 271—295. <https://doi.org/10.1093/jeg/lbn002>.
- Cohen, A.J., Vicol, M., & Pol, G. 2022. Living under value chains: The new distributive contract and arguments about unequal bargaining power. *Journal of Agrarian Change*, 22(1): 179—196. <https://doi.org/10.1111/joac.12466>.
- Cousins, B. 2010. *What is a smallholder? Class-analytic perspectives on small-scale farming and agrarian reform in South Africa*. In: P. Hebinck and C. Shackleton (eds.) *Reforming land and resource use in South Africa. Impact on livelihoods*, pp.102—127. Oxon, UK/New York: Routledge.
- Crane, A., Palazzo, G., Spence, L.J., Matten, D. 2014. Contesting the value of ‘creating shared value’. *California Management Review*, 56: 130—153. <https://doi.10.1525/cmr.2014.56.2.130>.
- Creswell, J.W. 2013. *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications, 4th Edition. https://fe.unj.ac.id/wp-content/uploads/2019/08/Research-Design_Qualitative-Quantitative-and-Mixed-Methods-Approaches.pdf. (Accessed 16 April 2020).
- Creswell, J.W. , & Clark, V.L.P. 2011. *Designing and conducting mixed methods research*. Sage Publication. https://us.sagepub.com/sites/default/files/upm-binaries/35066_Chapter3.pdf. (Accessed 16 April 2020)
- Dania, W.A.P, Xing, K., & Amer, Y. 2016. Collaboration and sustainable agri-food supply chain: a literature review. *BISSTECH 2015, MATEC Web of Conferences*, 58: 02004 (2016), pp.1—10. <https://doi.org/10.1051/e3sconf/202016410035>.
- Davis, B., Lipper, L., & Winters, P. 2022. *Do not transform food systems on the back of the rural poor*. Papers of the 2021 Rural Development Report. IFAD Research Series 70.
- Deans, H., Ros-Tonen, M.A.F & Derkyi, M. 2018. Advanced value chain collaboration in Ghana's cocoa sector: An entry point for integrated landscape approaches? *Environmental Management*, 62: 143—156. <https://doi.10.1007/s00267-017-0863-y>.
- Debela, B.L., Ruml, A., & Qaim, M. 2022. Effects of contract farming on diets and nutrition in Ghana. *Applied Economic Perspective and Policy*, 44: 911—929. <https://doi.10.1002/aepp.13204>.
- DeFries, R.S., Fanzo, J., Mondal, P., Remans, R., & Wood, S.A. 2017. Is voluntary certification of tropical agricultural commodities achieving sustainability goals for small-scale producers? A review of the evidence. *Environmental Research. Letters*, 12 (3): 033001, pp.1—11. <https://doi.org/10.1088/1748-9326/aa625e>.

- de Haan, L.J. 2012. The livelihood approach: A critical exploration. *Erdkunde*, 66(1): 345—357. Doi. [org/10.3112/erdkunde.2012.04.05](https://doi.org/10.3112/erdkunde.2012.04.05).
- de Haan, L., & Zoomers, A. 2005. Exploring the frontier of livelihood research. *Development and Change*, 36(1): 27—47. <https://doi.org/10.1111/j.0012-155X.2005.00401.x>.
- Denise, L. 1999. Collaboration vs. C-Three (Cooperation, Coordination, and Communication). *Innovating Reprint*, 7 (3): 1—6. The Rensselaerville Institute. <https://www.sccharterschools.org/assets/documents/collaborationvsthe3cs.pdf>.
- Deppeler, A., Fromm, I., & Aidoo, R. 2014. *The unmaking of the cocoa farmer: analysis of benefits and challenges of third-party audited certification schemes for cocoa producers and laborers in Ghana*. International Food and Agribusiness Management Association (IFAMA), Symposium, Cape Town, South Africa, June 16th, 2014. <http://www.ifama.org/files/conf/papers/1069.pdf>. (Accessed 7 June 2015).
- Devaux, A., Torero, M., Donovan, J., & Horton, D. 2018. Agricultural innovation and inclusive value-chain development: A review. *Journal of Agribusiness in Developing and Emerging Economies*, 8(1): 99—123. <https://doi.org/10.1108/JADEE-06-2017-0065>.
- DfID (Department for International Development). 1999. *Sustainable livelihoods guidance sheets: section 2*. <http://www.eldis.org/vfile/upload/1/document/0901/section2.pdf>. (Accessed 15 September 2009).
- Diniz, F.H. 2013. *From landless to forestless? Settlers, livelihoods and forest dynamics in the Brazilian Amazon*. PhD dissertation, Wageningen University, Wageningen.
- Donovan, J., Stoian, D., & Lundy, M. 2016. Challenges and approaches for inclusive value-chain development: introduction. International Food Policy Research Institute.
- Dorward, A., Anderson, S., Bernal, Y.N., Vera, E.S., Rushton, J., Pattison, J. & Paz, R. 2009. Hanging in, stepping up and stepping out: livelihood aspirations and strategies of the poor. *Development in Practice*, 19 (2): 240—247. <https://doi.org/10.1080/09614520802689535>.
- Dressler, W., de Koning, J., Montefrio, M., & Firn, J. 2016. Land sharing not sparing in the “green economy”: The role of livelihood bricolage in conservation and development in the Philippines. *Geoforum*, 76: 75—89. <https://doi.org/10.1016/j.geoforum.2016.09.003>.
- Eaton, C. & Shepherd, A.W. 2001. *Contract farming: Partnerships for growth*. FAO Agricultural Services Bulletin 145. Rome: FAO.
- Ecker, O., Trinh Tan, J.-F., Alpuerto, V., & Diao, X. 2012. *Economic growth and agricultural diversification matter for food and nutrition security in Ghana*. Discussion note #31. Ghana Strategy Support Program. Ann Arbor, MI: IFRI.
- Edelman, M. 2014: Food sovereignty: Forgotten genealogies and future regulatory challenges. *Journal of Peasant Studies*, 41(6): 959—978. <https://doi.org/10.1080/03066150.2013.876998>.
- Edelman, M., Weis, T., Baviskar, A., Borrás Jr, S.M., Holt Giménez, E., Kandiyoti, D., & Wolford, W. 2014. Introduction: Critical perspectives on food sovereignty. *Journal of Peasant Studies*, 41(6): 911—931. <https://doi.org/10.1080/03066150.2014.963568>.
- Ellis, F. 1998. Household strategies and rural livelihood diversification. *Journal of Development Studies*, 35(1): 1—38. <https://doi.org/10.1080/00220389808422553>.

- Ellis, F. 1999. Rural livelihood diversity in developing countries: Evidence and policy implications. *Natural Resource Perspectives*, 40: 1—10. Overseas Development Institute, April 1999.
- Ellis, F. 2000. The determinants of rural livelihood diversification in developing countries. *Journal of Agricultural Economics*, 51(2): 289—302. <https://doi.org/10.1111/j.1477-9552.2000.tb01229.x>.
- Elmhirst, R., Siscawati, M., Basnett, B. S., & Ekowati, D. 2017. Gender and generation in engagements with oil palm in East Kalimantan, Indonesia: Insights from feminist political ecology. *The Journal of Peasant Studies*, 44(6): 1135—1157. <https://doi.org/10.1080/03066150.2017.1337002>.
- Emtage, N., Herbohn, J., Harrison, S. 2007. Landholder profiling and typologies for natural resource management policy and program support: Potential and constraints. *Environmental Management*, 40: 481 —492. <https://doi.org/10.1007/s00267-005-0359-z>.
- Evans, R. Mariwah, S., Antwi, K.B. 2015. Struggles over family land? Tree crops, land and labour in Ghana's Brong-Ahafo region. *Geoforum*, 67: 24—35. <http://dx.doi.org/10.1016/j.geoforum.2015.10.006>.
- FANTA (Food and Nutrition Technical Assistance Project). 2007. *Guidelines for measuring household and individual dietary diversity*. Rome: FAO, EC/FAO, FANTA. <https://www.fantaproject.org/monitoring-and-evaluation/household-dietary-diversity-score>. (Accessed 2 July 2018).
- Fanzo, J., Covic, N., Dobermann, A., Henson, S., Herrero, M., Pingali, P., & Staal, S. 2020. A research vision for food systems in the 2020s: Defying the status quo. *Global food security*, 26: 100397, pp. 1—9. <https://doi.10.1016/j.gfs.2020.100397>.
- FAO (Food and Agriculture Organization of the United Nations). 2005. AQUASTAT Country Profile – Ghana. Food and Agriculture Organization of the United Nations (FAO). Rome, Italy. <https://www.fao.org/publications/card/en/c/I9749EN/>. (Accessed 5 December 2022).
- FAO (Food and Agriculture Organization of the United Nations). 2008. *An Introduction to the Basic Concepts of Food Security*. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/docrep/013/al936e/al936e00.pdf>. (Accessed 14 April 2016).
- FAO (Food and Agriculture Organization of the United Nations). 2012. Sustainable pathways fact sheet- Smallholders and family farmers. http://www.fao.org/fileadmin/templates/nr/sustainability_pathways/docs/Factsheet_SMALLHOLDERS.pdf. (Accessed 19 December 2018).
- FAO (Food and Agriculture Organization of the United Nations). 2013. *Agribusiness public-private partnerships – A country report of Ghana*, by Makindara, J. R. Country case studies – Africa. Rome. <https://www.fao.org/publications/card/en/c/f1249923-d420-5ca8-8505-3d30234e72cf/>. (Accessed 19 December 2018).
- FAO (Food and Agriculture Organization of the United Nations). 2015. Inclusive business models for the integration of smallholders into agrifood value chains. FAO policy brief Agroindustry policy brief 3, 2015. <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/522942/>. (Accessed 19 December 2018).
- FAO (Food and Agriculture Organization of the United Nations). 2016. *Public-private partnerships for agribusiness development – A review of international experiences*, by Rankin, M., Gálvez Nogales, E., Santacoloma, P., Mhlanga, N. & Rizzo, C. Rome, Italy. <https://www.fao.org/3/i5699e/i5699e.pdf>. (Accessed 8 November 2022).

- FAO (Food and Agriculture Organization of the United Nations). 2017a. The state of food and agriculture. Leveraging food systems for inclusive rural transformation. The state of food and agriculture. <https://www.fao.org/policy-support/tools-and-publications/resources-details/en/c/1046886/>. (Accessed 4 June 2020).
- FAO (Food and Agricultural Organization of the United Nations). 2017b. *Regional overview of food security and nutrition in Africa 2016. The challenges of building resilience to shocks and stresses*. Accra: FAO. Available at: <http://www.fao.org/publications/rofsn-africa/en/>. (Accessed 16 April 2020).
- FAO (Food and Agriculture Organization of the United Nations). 2018. The state of agricultural commodity markets. Agricultural trade, climate change and food security. <http://www.fao.org/3/I9542EN/i9542en.pdf>. (Accessed 8 June 2021).
- FAO (Food and Agriculture Organization of the United Nations). 2022a. *Status of digital agriculture in 47 sub-Saharan African countries. FAO and ITU*. Rome. <https://doi.org/10.4060/cb7943en>. (Accessed 8 November 2022).
- FAO (Food and Agriculture Organization of the United Nations). 2022b. Crops and livestock products. FAOSTAT. <http://www.fao.org/faostat/en/#data/QCL>. (Accessed 8 November 2022).
- FAO, IFAD, UNICEF, WFP, & WHO. 2022. *The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable*. Rome, FAO. <https://doi.org/10.4060/cc0639en>.
- Ferrara, E. La, Milazzo, A. 2017. Customary norms, inheritance, and human capital: Evidence from a reform of the matrilineal system in Ghana. *Applied Economics*, 9(4): 166—185. <https://doi.org/10.1257/app.20150342>.
- Fold, N. 2002. Lead firms and competition in ‘bi-polar’commodity chains: Grinders and branders in the global cocoa-chocolate industry. *Journal of Agrarian Change*, 2(2): 228—247.<https://doi.org/10.1111/1471-0366.00032>.
- Forum for Food Sovereignty. 2007. Declaration of the Forum for Food Sovereignty, Nyéléni, Mali. Forum for Food Sovereignty, 23–27 February 2007. Nyéléni Village, Sélingué, Mali. https://nyeleni.org/DOWNLOADS/Nyelni_EN.pdf. (Accessed April 21, 2018).
- Hofmeester, K. 2022. The global collaboratory on the history of labour relations: Putting women’s labor and labor relations in Sub-Saharan Africa in a global context. *African Economic History*, 50(1): 12—42. <https://doi.org/10.3368/aeH.50.1.12>.
- Frelat, R., Lopez-Ridaura, S., Giller, K.E., Herrero, M., Douxchamps, S., Djurfeldt, A.A., et al. 2016. Drivers of household food availability in sub-Saharan Africa based on big data from small farms. *Proceedings of the National Academy of Sciences*, 113: 458—463. <https://doi.org/10.1073/pnas.1518384112>.
- GCB (Ghana Commercial Bank). 2022. Sector industry analysis- cocoa sector report 2022. GCB strategy and research department. <https://www.gcbbank.com.gh/research-reports/sector-industry-reports/120-cocoa-industry-in-ghana-2022/file>. (Accessed 15 November 2022).

- GEPA (Ghana Export Promotion Authority). 2022. Ghana's non-traditional exports records \$3.33 billion in 2021. July 2022. <https://www.gepaghana.org/ghanas-non-traditional-exports-records-3-33-billion-in2021/#:~:text=Agricultural%20Sub%2DSector%20Export,in%20the%20year%20under%20review>. (Accessed 15 November 2022).
- Gereffi, G., & Fernandez-Stark, K. 2016. *Global value chain analysis: A primer 2nd Edition*. Center on globalization, governance and competitiveness, Duke University, 2016.
- German, L.A., Bonanno, A.M., Foster, L.C., & Cotula, L. 2020. "Inclusive business" in agriculture: Evidence from the evolution of agricultural value chains. *World Development*, 134, 105018, pp.1—21. <https://doi.10.1016/j.worlddev.2020.105018>.
- GSS (Ghana Statistical Service). 2014. *The 2010 population and housing census, district analytical report, Ahafo-Ano North District*. http://www.statsghana.gov.gh/docfiles/2010_District_Report/Ashanti/AHAFO%20ANO%20NORTH.pdf. (Accessed 1 February 2016).
- GSS (Ghana Statistical Service). 2021. *Ghana 2021 Population and Housing Census*. General Report Volume 3E Economy Activity. December 2021. <https://census2021.statsghana.gov.gh/>. (Accessed 8 November 2022).
- Giller, K.E., Delaune, T., Silva, J.V., van Wijk, M., Hammond, J., Descheemaeker, K., van de Ven, G., Schut, A.G.T., Taulya, G., Chikowo, R., & Andersson, J.A. 2021. Small farms and development in sub-Saharan Africa: Farming for food, for income or for lack of better options? *Food Security*, 13: 1431—1454. <https://doi.org/10.1007/s12571-021-01209-0>.
- Giménez, H.E., & Altieri, M.A. 2013. Agro-ecology, food sovereignty, and the new green revolution. *Agro-ecology and Sustainable Food Systems*, 37: 90—102. <https://doi.org/10.1080/10440046.2012.716388>.
- GIPC (Ghana Investment Promotion Centre). 2021. Ghana's agricultural sector profile. RBDD, May 2021. <https://gipc.gov.gh/wp-content/uploads/2022/03/Agriculture-Sector-Profile-2021.pdf>. (Accessed 15 November 2022).
- Glasbergen, P. 2018. Smallholders do not Eat Certificates. *Ecological Economics*, 147(2018): 243—252. <https://doi.org/10.1016/j.ecolecon.2018.01.023>.
- GoG/NDPC (Government of Ghana/National Development Planning Commission). 2010. *Medium-Term National Development Policy Framework: Ghana Shared Growth and Development Agenda (GSGDA) I, 2010-2013*. Volume 1:Policy Framework, final draft, September 2010. https://ndpc.gov.gh/media/Ghana_Shared_Growth_and_Development_Agenda_GSGDA_I_2010-2013.pdf. (Accessed 6 June 2016).
- GoG/NDPC (Government of Ghana/National Development Planning Commission). 2014. *Medium-Term National Development Policy Framework: Ghana Shared Growth and Development Agenda (GSGDA) II, 2014-2017*. Volume 1:Policy Framework, December 2014. https://ndpc.gov.gh/media/Ghana_Shared_Growth_and_Development_Agenda_GSGDA_II_2014-2017.pdf. (Accessed 6 June 2016).
- GoG/NDPC (Government of Ghana /National Development Planning Commission). 2017. *An agenda for jobs: creating prosperity and equal opportunity for all (first step) 2018-2021*. https://mofa.gov.gh/site/images/pdf/National%20Agriculture%20Investment%20Plan_IFJ.pdf. (Accessed 18 June 2020).

- GoG/NDPC (Government of Ghana /National Development Planning Commission). 2021. *Medium-Term National Development Policy Framework: National Medium-Term Development Policy Framework 2022-2025*. December 2021. https://ndpc.gov.gh/media/MTNDPF_2022-2025_Dec-2021.pdf. (Accessed 18 June 2021).
- Grain 2014. *Hungry for land. Small farmers feed the world with less than a quarter of all farmland*. Report, May 2014. Pp 1—22. <https://grain.org/article/entries/4929-hungry-for-land-small-farmers-feed-the-world-with-less-than-a-quarter-of-all-farmland>. (Accessed 6 December 2022).
- Greenberg, S. 2013. *Smallholder and value chain integration in South Africa*. In Greenberg, S. (ed), *Smallholders and Agro-Food Value Chains in South Africa: Emerging Practices, Emerging Challenges*. Cape Town, South Africa: Institute for Poverty, Land and Agrarian Studies, School of Government (PLAAS), pp.1—8.
- Grega, L., Ankomah, E.K., & Darkwah, S.A. 2015. Analysis of land tenure systems and its relationship with productivity in the agricultural sector in Ghana. *ACTA*, 63: 893—902. <https://doi.org/10.11118/actaun201563030893>.
- Gross, R. Schoeneberger, H. Pfeifer, H., & Preuss, H.J.A. 2000. *The four dimensions of food and nutrition security: Definitions and concepts*. Rome: FAO/inWent,
- Guest, G., Bunce, A., & Johnson, L. 2006. How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18: 59—82. <https://doi.org/10.1177/1525822X052799>.
- Guijt, J., de Steenhuijsen Pijters, B., & Smaling, E. 2021. *Transforming Food Systems: Governance for healthy, inclusive and sustainable food systems* (No. 2021-093). The Hague/Wageningen: Wageningen Economic Research.
- Gupta, J., Pouw, N.R.M., Ros-Tonen, M.A.F. 2015. Towards an elaborated theory of inclusive development. *European Journal of Development Research*, (2015) 27: 541—559. <https://doi.10.1057/ejdr.2015.30>.
- Gupta, J., & Vegelin, C. 2016. Sustainable development goals and inclusive development. *International Environmental Agreements*, 16(2016): 433—448. <https://doi.10.1007/s10784-016-9323-z>.
- Gyapong, A.Y. 2020. Commodification of family lands and the changing dynamics of access in Ghana. *Third World Quarterly*, 42(6): 1233—1251. <https://doi.org/10.1080/01436597.2021.1880889>.
- Gyasi, E.A. 1994. The adaptability of African communal land tenure to economic opportunity: The example of land acquisition for oil palm farming in Ghana. *Journal of the International African Institute*, 64: 391—405. <https://doi.org/10.2307/1160788>.
- Haddaway, N.R., Collins, A.M., Coughlin, D., & Kirk, S. 2015. The role of Google Scholar in evidence reviews and its applicability to grey literature searching. *PLoS one*, 10(9): e0138237. <https://doi.org/10.1371/journal.pone.0138237>.
- Hainmueller, J., Hiscox, M., Tampe, M. 2011. Sustainable development for cocoa farmers in Ghana. Working paper International Growth Center. MIT and Harvard University, March 2011.
- Hammond, D. 2013. *Commissioner for Oaths at Work* Graphic, 03 September 2013. <https://www.graphic.com.gh/features/features/commissioners-for-oaths-at-work.html>. (Accessed 6 August 2020).

- Helmsing, A.H.J. & Vellema, S. 2011. Governance, inclusion and embedding: Raising the issues. In: Helmsing, A.H.J. and Vellema, S. (eds.), *Value chains, inclusion and economic development: Contrasting theories and realities*. Oxon, UK/New York: Routledge, pp. 1—16.
- Hickey, S., & Toit, A.D. 2013. Adverse incorporation, social exclusion, and chronic poverty. In *chronic poverty*, pp. 134—159. Palgrave Macmillan, London.
- Himley, M. 2009. Nature conservation, rural livelihoods, and territorial control in Andean Ecuador. *Geoforum*, 40 (2009): 832—842. <https://doi.org/10.1016/j.geoforum.2009.06.001>.
- Hodey, L.S., & Dzanku, F.M. 2021. A multi-phase assessment of the effects of COVID-19 on food systems and rural livelihoods in Ghana. APRA COVID-19 Country Report, Brighton: Future Agricultures Consortium. <https://doi.10.19088/APRA.2021.041>.
- Hodgson, G.M. 2006. What are institutions? *Journal of Economic Issues*, XL(1): 1—25.
- Holt-Giménez, E., & Altieri, M.A. 2013. Agroecology, food sovereignty, and the new green revolution. *Agroecology and Sustainable Food Systems*, 37(1): 90—102. <https://doi.org/10.1080/10440046.2012.716388>.
- Hoogerwerf, A. 1990. Reconstructing policy theory. *Evaluation and Program Planning*, 13: 285—291. [https://pii.0149-7189\(90\)90059-6](https://pii.0149-7189(90)90059-6).
- Hospes, O., & Clancy, J. 2011. Unpacking the discourse on social inclusion in value chains. In A.H.J. Helmsing & S. Vellema (eds) 2011, *Value chains, social inclusion and economic development. Contrasting theories and realities*. Routledge studies in Development Economics, pp. 23—41.
- Hounkonnou, D., Kossou, D., Kuyper, T.W., Leeuwis, C., Nederlof, E.S., Röling, N., Sakyi-Dawson, O., Traoré, M., & van Huis, A. 2012. An innovation systems approach to institutional change: Smallholder development in West Africa. *Agricultural Systems*, 108 (2012): 74—83. <https://doi.org/10.1016/j.agsy.2012.01.007>.
- Huddleston, P., & Tonts, M. 2007. Agricultural Development, Contract Farming and Ghana's Oil Palm Industry. *Geography*, 92(3): 266—278. <https://doi.org/jstor.org/stable/40574339>.
- Hussein, F.M., Ahmed, A.Y., & Muhammed, O.S. 2018. Household food insecurity access scale and dietary diversity score as a proxy indicator of nutritional status among people living with HIV/AIDS, Bahir Dar, Ethiopia, 2017. *PLOS ONE*, 13: e0199511. <https://doi.org/10.1371/journal.pone.0199511>.
- Ickowitz, A., Powell, B., Rowland, D., Jones, A., & Sunderland, T. 2019. Agricultural intensification, dietary diversity, and markets in the global food security narrative. *Global Food Security*, 20(1-3): 9—16. <https://doi.10.1016/j.gfs.2018.11.002>.
- IFAD (International Fund for Agricultural Development). 2013. *IFAD and public-private partnerships: Selected project experiences*. Rome: IFAD, <http://www.ifad.org/pub/partnerships/ppp.pdf>. (Accessed 3 May 2014).
- IFAD (International Fund for Agricultural Development). 2014. *Investing in smallholder family farms for the future we want*. Rome: IFAD. <https://www.ifad.org/fr/web/latest/-/event/investing-in-smallholder-family-farmers-for-the-future-we-want>. (Accessed 8 May 2016)
- IFAD (International Fund for Agricultural Development). 2016a. *Fostering inclusive rural transformation*. Rural Development Report 2016. <https://doi.org/10.1016/j.ijplas.2013.08.003>.

- IFAD (International Fund for Agricultural Development). 2016b. *How to do Public-Private-Producer Partnerships (4Ps) in Agricultural Value Chains*. 2016. <https://www.ifad.org/documents/10180/998af683-200b-4f34-a5cdfd7ffb999133>. (Accessed 16 August 2019)
- Inclusive Value Chain Project. 2015. Inclusive value chain collaboration. <https://inclusivevcc.wordpress.com/>. (Accessed 14 February 2016).
- Ingram, V., Waarts, Y., Ge, L., van Vugt, S., Wegner, L., Puister-Jansen, L., Ruf, F., & Tanoh, R. 2014. The IDH Cocoa Productivity and Quality Programme (CPQP) in Côte d'Ivoire. Impact assessment framework and baseline. Available at <http://edepot.wur.nl/311372>. (Accessed 7 July 2019).
- Ingram, V., van Rijn, F., Waarts, Y., & Gilhuis, H. 2018. The impacts of cocoa sustainability initiatives in West Africa. *Sustainability*, 10 (11): 4249, pp. 1–20. <https://doi.org/10.3390/su10114249>.
- Jakimow, T. 2013. Unlocking the black box of institutions in livelihoods analysis: Case study from Andhra Pradesh, India. *Oxford Development Studies*, 41(4): 493–516. <https://doi.org/10.1080/13600818.2013.847078>.
- Jarosz, L. 2014. Comparing food security and food sovereignty discourses. *Dialogues in Human Geography*, 4(2): 168–181. <https://doi.org/10.1177/2043820614537161>.
- Jarzebski, M.P., Ahmed, A., Bofofo, Y.A., Balde, B.S., Chinangwa, L., Saito, O., von Maltitz, G., & Gasparatos, A. 2020. Food security impacts of industrial crop production in sub-Saharan Africa: a systematic review of the impact mechanisms. *Food Security*, 12: 105–135. <https://doi.org/10.1007/s12571-019-00988-x>.
- Jelsma, I., Schoneveld, G.C., Zoomers, A., & van Westen, A.C.M. 2017. Unpacking Indonesia's independent oil palm smallholders: An actor-disaggregated approach to identifying environmental and social performance challenges. *Land Use Policy*, 69: 281–297. <https://doi.org/10.1016/j.landusepol.2017.08.012>.
- Jelsma, I. 2019. *In search of sustainable and inclusive palm oil production: The role of smallholders in Indonesia*. PhD dissertation, University of Utrecht.
- Jerneck, A., & Olsson, L. 2008. Adaptation and the poor: development, resilience and transition. *Climate Policy*, 8 (2): 170–182. <https://doi.org/10.3763/cpol.2007.0434>.
- Kabeer, N. 2000. Social exclusion, poverty and discrimination: Towards an analytical framework. *IDS Bulletin* 3(4): 83–97. <https://doi.org/10.1111/j.1759-5436.2000.mp31004009.x>.
- Kennedy, G., Ballard, T., & Dop, M. 2013. *Guidelines for measuring household and individual dietary diversity*. Nutrition and Consumer Protection Division, Food and Agriculture Organization of the United Nations (FAO). <https://www.fao.org/3/i1983e/i1983e00.pdf>. (Accessed 14 June 2019).
- Khalil, C.A., Conforti, P., Ergin, I., & Gennari, P. 2017. *Defining small-scale food producers to monitor target 2.3 of the 2030 Agenda for Sustainable Development*. Statistics Division Working Paper ESS/17-12. FAO, Rome. <https://www.fao.org/3/i6858e/i6858e.pdf>. (Accessed 14 June 2019)
- Khatun, K., Maguire-Rajpaul, V.A., Asante E.A., & McDermott, C.L. 2020. From agroforestry to agroindustry: Smallholder access to benefits from oil palm in Ghana and the implications for sustainability certification. *Front. Sustain. Food Syst.* 4: 29, pp. 1–3. <https://doi.org/10.3389/fsufs.2020.00029>.

- Kilelu, C., Klerkx, L., Omore, A., Baltenweck, I., Leeuwis, C. & Githinji, J. 2017. Value chain upgrading and the inclusion of smallholders in markets: Reflections on contributions of multi-stakeholder processes in dairy development in Tanzania. *The European Journal of Development Research*, 29: 1102—1121. <https://doi.org/10.1057/s41287-016-0074-z>.
- Kirsten, J. & Sartorius, K. 2002. Linking agribusiness and small-scale farmers in developing countries: Is there a new role for contract farming? *Development Southern Africa*, 19(4): 503—529. <https://doi.org/10.1080/0376835022000019428>.
- Kissinger, G., Brasser, A. & Gross, L. 2013. *Scoping study. Reducing risk: Landscape approaches to sustainable sourcing*. Washington, DC: Landscapes for People, Food and Nature Initiative.
- Kleine, D., Light, A. & Montero, M.J. 2012. Signifiers of the life we value? – considering human development, technologies and Fair Trade from the perspective of the capabilities approach. *Information Technology for Development*, 18(1): 42—60. <https://doi.10.1080/02681102.2011.643208>.
- Knudsen, M.H., & Fold, N. 2011. Land distribution and acquisition practices in Gh̃na's cocoa frontier: The impact of a state-regulated marketing system. *Land Use Policy*, 28(2): 378—387. <https://doi.org/10.1016/j.landusepol.2010.07.004>.
- Kok, K., & Van Vliet, M. 2011. Using a participatory scenario development toolbox: added values and impact on quality of scenarios. *Journal of water and climate change*, 2(2-3): 87—105. <https://doi.org/10.2166/wcc.2011.032>.
- Komives, K., Grunze, S., Krain, E., Tschanz, A., Daniels, S., & Seville, D. 2015. *Defining, calculating and using living income benchmark in the context of agricultural commodities*. ISEAL, GIZ, and Sustainable Food Lab Living Income Discussion Note, working version May 2015, pp. 1—18.
- Kooijmans, L. 2016. *Space for deliberations in Ghana's cocoa sector: Exploring how smallholder cocoa farmers pursue their aspirations by navigating their networks, built around locally embedded value-chain collaborations with and without involvement of certification programmes*. MSc. dissertation, University of Amsterdam. Amsterdam, the Netherlands.
- Kuivanen, K.S., Alvarez, S., Michalscheck, M., Adjei-Nsiah, S., Descheemaeker, K., Mellon-Bedi, S., & Groot, J.C.J. 2016. Characterising the diversity of smallholder farming systems and their constraints and opportunities for innovation: A case study from the Northern Region, Ghana. *Wageningen Journal of Life Sciences*, 78: 153—166. <http://pubs.iied.org/16521IIED.html>. (Accessed 14 June 2020).
- Kuwornu, J.K.M., Suleyman, D.M., & Amegashie D.P.K. 2013. Analysis of food security status of farming households in the forest belt of the Central Region of Ghana. *Russian Journal of Agricultural and Socio-Economic Sciences*, 1: 26—42.
- Läderach, P., Martinez-Valle, A., Schroth, G., & Castro, N. 2013. Predicting the future climatic suitability for cocoa farming of the world's leading producer countries, Ghana and Côte d'Ivoire. *Climatic change*, 119(3-4), 841—854. <https://doi.org/10.1007/s10584-013-0774-8>.
- Lambrecht, I.B. 2016. “As a husband I will love, lead, and provide.” Gendered access to land in Ghana. *World Development*, 88: 188—200. <https://doi.org/10.1016/j.worlddev.2016.07.018>.

- Laven, A.C. 2010. *The risks of inclusion: Shifts in governance processes and upgrading opportunities for cocoa farmers in Ghana*. PhD dissertation, University of Amsterdam. Amsterdam: KIT Publishers.
- Laven, A. & Boomsma, M. 2012. *Incentives for sustainable cocoa production in Ghana*. The Royal Tropical Institute (KIT), Amsterdam, Netherlands. May 2012. https://www.worldcocoafoundation.org/wpcontent/uploads/files_mf/laven201297.pdf. (Accessed 7 July 2016).
- LeBaron, G., & Gore, E. 2020. Gender and forced labour: Understanding the links in global cocoa supply chains. *The Journal of Development Studies*, 56(6): 1095—1117. <https://doi.org/10.1080/00220388.2019.1657570>.
- Leftwich, A. & Sen, K. 2010. *Beyond institutions: institutions and organizations in the politics and economics of growth and poverty reduction—a thematic synthesis of research evidence*. IDPM, School of Environment and Development. University of Manchester.
- Leroy, J.L., Ruel, M., Frongillo, E.A., Harris, J., & Ballard, T.J. 2015. Measuring the food access dimension of food security: A Critical review and mapping of indicators. *Food and Nutrition Bulletin*, 36(2): 167—195. <https://doi.org/10.1177/0379572115587274>.
- Levine, S. 2014. *How to study livelihoods: Bringing a sustainable livelihood framework to life*. ODI working paper 22, September 2014, pp. 1—23.
- Levy, Y., & Ellis, T.J. 2006. A systems approach to conduct an effective literature review in support of information systems research. *International Journal of an Emerging Transdisciplinary*, 9: 181—212. <https://doi.org/10.28945/479>.
- Likoko, E., & Kini, J. 2017. Inclusive business- a business approach to development. *Current Opinions in Environmental Sustainability*, 24: 84—88. <https://doi.org/10.1016/j.cosust.2017.03.001>.
- Little, P., & Watts, M. (Eds.). 1994. *Living under contract: Contract farming and agrarian transformation in sub-Saharan Africa*. The University of Wisconsin Press.
- Long, N. 2008. *Resistance, agency and counterwork: A theoretical positioning*. In: Wright, W. and Middendorf, G. (eds.) *The Fight Over Food. Producers, Consumers and Activists Challenge the Global Food System*, pp. 69—92. Pennsylvania: Pennsylvania State University Press.
- Lowitt, K., Hickey, G.M., Ganpat, W., & Phillip, L. 2015. Linking communities of practice with value chain development in smallholder farming systems. *World Development*, 74: 363—373. <https://doi.org/10.1016/j.worlddev.2015.05.014>.
- Lutz, C., & Olthaar, M. 2017. Global value chains and smallholders in sub-Saharan Africa. *Review of Social Economy*, 75(3): 251—254. <https://doi.org/10.1080/00346764.2017.1357321>.
- LVC (La Via Campesina). 2018. *La Via Campesina International Peasant Movement Annual Report 2018*, pp. 1—46.
- Ma, M., & Sexton, R.J. 2021. Modern agricultural value chains and the future of smallholder farming systems. *Agricultural Economics*, 52(4): 591—606. <https://doi.org/10.1111/agec.12637>.
- Manley, R. 2016. *Peasant agency in global value chains: An examination of how small-scale oil palm farmers in Ghana exercise agency through peasant agriculture*. MSc. dissertation, University of Amsterdam. Amsterdam, the Netherlands.

- Manley, R., & Van Ieynseele, Y. 2019. Peasant agency in Ghana's oil palm sector: The impact of multiple markets on food sovereignty. *Journal of Agrarian Change*, 19(4): 654—670. <https://doi.org/10.1111/joac.12323>.
- Manteaw, S.A., Sakyi-Dawson, O., Atengdem, P.B., & Sarpong, D.B. 2014. Implications of policy on publicly and privately driven agricultural industries: case study of cocoa and pineapple value chains in Ghana. *International Journal of Agricultural Extension*, 2(1): 65—79.
- Marchetta, F. 2011. On the move, livelihood strategies in Northern Ghana. CERDI, Etudes et Documents, E 2011.13, Avril 2011.
- Marin-Burgos, V., & Clancy, J.S. 2017. Understanding the expansion of energy crops beyond the global biofuel boom: evidence from oil palm expansion in Colombia. *Energy, sustainability and society*, 7(1): 1—21. <https://doi.org/10.1186/s13705-017-0123-2>.
- Mariner, J.C., & Paskin, R. 2000. FAO animal health manual on participatory epidemiology method for the collection of action-oriented epidemiological intelligence. Food and Agriculture Organization Rome.
- Martey, E., Etwire, P.M., Wiredu, A.N., Dogbe, W. 2014. Factors influencing willingness to participate multi-stakeholder platform by smallholder farmers in Northern Ghana: implication for research and development. *Agricultural and Food Economics*, 2014 2(11), pp. 1—15. <https://doi:10.1186/s40100-014-0011-4>.
- Matita, M., Chirwa, E.W., Kaiyatsa, S., Mazalale, J., Chimombo, M., Mgalamadzi, L.M., & Chinsinga, B. 2022. Determinants of smallholder farmers' livelihood trajectories. Evidence from rural Malawi, Agrekon, pp. 1—14. <https://doi.10.1080/03031853.2022.2107030>.
- McCarthy, J. 2010. Processes of inclusion and adverse incorporation: oil palm and agrarian change in Sumatra, Indonesia. *The Journal of Peasant Studies*, 37(4): 821—850.
- McLean, J.E. 2015. Beyond the pentagon prison of sustainable livelihood approaches and towards livelihood trajectories approaches. *Asia Pacific Viewpoint*, 56(3): 380—391. <https://doi.org/10.1111/apv.12097>.
- McMichael, P. 2013. Value-chain agriculture and debt relations: Contradictory outcomes. *Third World Quarterly*, 34 (4): 671—690. <https://doi.10.1080/01436597.2013.786290>.
- Meemken, E.M., & Bellemare, M.F. 2020. Smallholder farmers and contract farming in developing countries. *Proceedings of the National Academy of Sciences*, 117(1): 259—264. <https://doi.org/10.1073/pnas.1909501111>.
- Michelson, H.C., 2013. Small farmers, NGOs, and a WALMART world: Welfare effects of supermarkets operating in Nicaragua. *American Journal of Agricultural Economics*, 95(3): 628—649. <https://doi.org/10.1093/ajae/aas139>.
- MoFA (Ministry of Food and Agriculture). 2002. *Food and agriculture sector development policy (FASDEP I)*. http://mofa.gov.gh/site/?page_id=598. (Accessed 13 June 2016).
- MoFA (Ministry of Food and Agriculture). 2006. *Program for the promotion of perennial crops in Ghana*. http://mofa.gov.gh/site/?page_id=4651. (Accessed 13 June 2016).
- MoFA (Ministry of Food and Agriculture). 2007. *Food and agriculture sector development policy (FASDEP II)*. http://mofa.gov.gh/site/?page_id=598. (Accessed 13 June 2016).

- MoFA (Ministry of Food and Agriculture). 2010. *Medium Term Agriculture Sector Investment Plan (METASIP) 2011-2015*. Ministry of Food and Agriculture, September 2010. <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC144958/>. (Accessed 13 June 2016).
- MoFA (Ministry of Food and Agriculture). 2011a. *Masterplan study on the oil palm industry in Ghana (MASDAR)*. Final Report, November, 2011. http://mofa.gov.gh/site/?page_id=10244. (Accessed 13 June 2016.)
- MoFA (Ministry of Food and Agriculture). 2011b. *The Outgrower and Value Chain Fund(OVCF)*. <https://mofa.gov.gh/site/projects/the-outgrower-and-vlaue-chain-fund-ovcf>. (Accessed 14 November 2022).
- MOFA (Ministry of Food and Agriculture). 2011c. *Agriculture in Ghana: facts and figures (2010)*. Statistics, Research and Information Directorate (SRID). <http://mofa.gov.gh/site/wp-content/uploads/2011/10/AGRICULTURE-IN-GHANA-FF-2010.pdf>. (Accessed 1 February 2015).
- MoFA (Ministry of Food and Agriculture). 2012. *Tree-crop policy, 2012*. <https://s3.amazonaws.com/ndpcstatic/pubication/Tree+Crops+Policy.pdf>. (Accessed 18 March 2016).
- MoFA (Ministry of Food and Agriculture). 2017. *Planting for Food and Jobs (PFJ)*. <https://mofa.gov.gh/site/programmes/pfj>. (Accessed 15 July 2022).
- MoFA (Ministry of Food and Agriculture). 2018a. *Agriculture in Ghana.: Facts and figures (2017)*. Statistics, Research and Information Directorate, October 2018.
- MoFA (Ministry of Food and Agriculture). 2018b. *Investing for Food and Jobs (IFJ): An agenda for transforming Ghana's agriculture (2018-2021)*. Ministry of Food and Agriculture, January 2018.
- MoFA (Ministry of Food and Agriculture). 2019. *Agriculture in Ghana.: Facts and figures (2018)*. Statistics, Research and Information Directorate, October 2019.
- MoFA (Ministry of Food and Agriculture). 2020. *Planting for Food & Jobs programmes.* <https://mofa.gov.gh/site/programmes/pfj>. (Accessed 15 September 2022).
- MoFA (Ministry of Food and Agriculture). 2022. *Review of the producer price of cocoa for the 2021/22 cocoa season*. <https://mofa.gov.gh/site/media-centre/press-briefing/372-review-of-the-producer-price-of-cocoa-for-the-2021-22-cocoa-season>. (Accessed 18 November 2022).
- MOFEP (Ministry of Finance and Economic Planning). 2015. *The composite budget of the Ahafo-Ano North District Assembly*. <http://www.mofep.gov.gh/sites/default/files/budget/2015/Composite/AR/Ahafo-Ano-North.pdf>. (Accessed 29 January 2016).
- Moncoquet, C. 2018. *The role of the private sector in achieving sustainable development. A comparative case study in Ghana's oil palm sector*. MSc thesis. University of Amsterdam. The Netherlands.
- Moncoquet, K. & Ros-Tonen, M.A.F. 2019. Ghana's oil palm sector, pointing a way towards inclusive development? *ETFRN News*, 59: 119—126
- Mooi, E., & Sarstedt, M. 2011. Cluster analysis. In *A concise guide to market research*. Berlin: Springer-Verlag.
- Mortimore, M.J., & Adams, W.M. 2001. Farmer adaptation, change and “crisis” in the Sahel. *Global Environmental Change*, 11: 49—57. [https://doi.org/10.1016/S0959-3780\(00\)00044-3](https://doi.org/10.1016/S0959-3780(00)00044-3).
- Moser, C. 2007. *Ending global poverty: The case for asset accumulation*. Brookings Institute.

- Moyo, S. 2016. Family farming in sub-Saharan Africa: Its contribution to agriculture, food security and rural development, Working Paper, No. 150, International Policy Centre for Inclusive Growth (IPC-IG), Brasilia.
- Murray, C. 2000. Changing livelihoods: The free state, 1990s. *African Studies*, 59(1): 115—142. <https://doi.org/10.1080/713650975>.
- Nabhani, I., Daryanto, A., Yassin, M., & Rifin, A. 2015. Can Indonesia Cocoa Farmers Get Benefit on Global Value Chain Inclusion? A Literature Review. *Asian Social Science*, 11(18): 288—294. <https://doi:10.5539/ass.v11n18p288>.
- Nelson, I.A. 2010. From quantitative to qualitative : Adapting the life history calendar method. *Field Methods*, 22(4): 413—428. <https://doi.org/10.1177/1525822X10379793>.
- Nelson, V. & Phillips, D. 2018. Sector, landscape or rural transformations? Exploring the limits and potential of agricultural sustainability initiatives through a cocoa case study. *Business Strategy and the Environment*, 27: 252—262. <https://doi.10.1002/bse.2014>.
- Niehof, A. 2004. The significance of diversification for rural livelihood systems. *Food policy*, 29(4): 321—338. <https://doi.org/10.1016/j.foodpol.2004.07.009>.
- Noack, A.L., & Pouw, N.R.M. 2015. A blind spot in food and nutrition security: where culture and social change shape the local food plate. *Agriculture and Human Values*, 32(2): 169—182. <https://doi.org/10.1007/s10460-014-9538-y>.
- North, D.C. 1990. *Institutions, institutional change and economic performance*. Cambridge University Press, Cambridge.
- NPC. 2013. *National Development Plan 2030 our future - make it work*. Pretoria: SA Government. <https://doi.org/10.1210/me.2010-0352>.
- Nsamba-Gayiyi, E., & Kamusiime, H. 2015. *Brokering development: Enabling factors for public-private-producer partnerships in agricultural value chains, summary of Uganda case study*. Briston: IDS and Rome: IFAD.
- Nyamwena-Mukonza, C. 2013. A conceptual framework for implementing sustainable livelihoods and innovation in biofuel production among smallholder farmers. *African Journal of Science, Technology, Innovation and Development*, 5(3): 180—188. <https://doi.10.1080/20421338.2013.796750>.
- Odhiambo, M.O. 2015. *Land policies and their implications for smallholder agriculture in Africa: A review of policies in six countries*. AGRA Report, Nairobi, May 2015. <https://knowledge4food.net/knowledge-portal-item/land-policies-implications-smallholder-agriculture-africa/>. (Accessed 29 May 2017).
- Oduol, J.B.A., Mithofer, D., Place, F., Nangole E., Olwande, J., Kirimi L. & Mathenge, M. 2017. Women's participation in high-value agricultural commodity chains in Kenya: Strategies for closing the gender gap. *Journal of Rural Studies*, 50: 228—239. <https://doi.org/10.1016/j.jrurstud.2017.01.005>.
- Ofosu-Budu, K., & Sarpong, D. 2013. *Oil palm industry growth in Africa: A value chain and smallholders study for Ghana*, In: Rebuilding West Africa's Food Potential, A. Elbehri (ed.), FAO/IFAD.

- Olofsson, M. 2020. Socio-economic differentiation from a class analytic perspective: The case of smallholder tree-crop farmers in Limpopo, South Africa. *Journal of Agrarian Change*, 20(1): 37—59. <https://doi.org/10.1111/joac.12335>.
- Olofsson, M. 2021. Expanding commodity frontiers and the emergence of customary land markets: A case study of tree-crop farming in Venda, South Africa. *Land Use Policy*, 101, 105203.
- Olofsson, M.J. 2023. Dynamics of agrarian change at a commodity frontier: Differentiation and accumulation trajectories amongst smallholder tree-crop farmers in South Africa. PhD Dissertation, University of Amsterdam. Amsterdam, Netherlands.
- Onwuegbuzie, A.J., & Collins, K.M. 2007. A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2): 281—316. <https://doi.org/10.46743/2160-3715/2007.1638>.
- Osei-Amponsah, C., Visser, L., Adjei-Nsiah, S., Struik, P.C., Sakyi-Dawson, O., & Stomph, T.J. 2012. Processing practices of small scale palm oil producers in the Kwaebibrem District, Ghana: A diagnostic study. *Wageningen Journal of Life Science*, 60-63: 49 —56. <https://doi.org/10.1016/j.njas.2012.06.006>.
- Owusu, O., & Tsamenyi, E. 2017. A quantitative assessment of the National Cocoa Disease and Pest Control (CODAPEC) Programme in Ghana. *Journal of Economics and Sustainable Development*, 8(14): 277—285. <https://doi.org/10.13140/RG.2.2.10005.93927>.
- Owusu-Amankwah, R., Ruivenkamp, G. Essegbey, G., & Frempong, G. 2017. The extent, nature and effect of diversification on livelihood of farmers: A case study of the cocoa farmers in Ghana. *International Journal of Agriculture, Innovations and Research*, 5(5): 652—657.
- Oxfam. 2014. Moral hazard? 'Mega' public-private partnerships in African agriculture. Oxfam Briefing Paper 188, September 2014. <https://policy-practice.oxfam.org/resources/moral-hazard-mega-public-private-partnerships-in-african-agriculture-325221/>. (Accessed 13 June 2016).
- Pallant J. 2016. SPSS survival manual: A step by step guide to data analysis using IBM SPSS-6th Edition. McGraw Hill Education. Routledge, London. <https://doi.org/10.4324/9781003117452>.
- Peck, C.R., & Anderson, J. 2013. Segmentation of smallholder households: Meeting the range of financial needs in agricultural families. CCAP. <https://www.cgap.org/research/publication/segmentation-smallholder-households>. (Accessed 8 August 2021).
- Perea, J., de Pablos-Herederó, C., Angón, E., Giorgis, A., Barba, C., & García, A. 2014. Using farmer decision-making profiles and managerial capacity as predictors of farm viability in Argentinean dairy farms (la pampa). *Revista Científica*, XXIV(6): 509 — 517.
- Porter, M.E. & Kramer, M.R. 2011. Creating social value. *Harvard Business Review*, 2011. <http://hbr.org/2011/01/the-big-idea-creating-shared-value/ar/pr>. (Accessed 2 June 2016)
- Posthumus, H., de Steenhuijsen Piters, B., Dengerink, J., & Vellema, S. 2018. Food systems: From concept to practice and vice versa. Wageningen: Wageningen Economic Research and KIT Tropical Institute. <https://doi.org/10.18174/464054>.
- PPP (Public Private Partnership) ACT. 2020. *The one thousand and thirty-ninth ACT of the parliament of the Republic of Ghana*, December 2020. <https://mofep.gov.gh/sites/default/files/acts/PPP-ACT-1039.pdf>. (Accessed 3 June 2022).

- Pyburn, R. 2014. Gender equitable and inclusive innovation platforms. In: S. Sanyang, R. Pyburn, R. Mur and G. Audet-Bélanger (eds.) *Against the grain and to the roots. Maize and cassava innovation platforms in West and Central Africa*. Amsterdam, The Netherlands: CORAF/WECARD and KIT Publishers.
- Qin, H., & Flint, C.G. 2012. Integrating rural livelihoods and community interaction into migration and environment research: A conceptual framework of rural out-migration and the environment in developing countries. *Society & Natural Resources*, 25(10): 1056—1065. <https://doi.org/10.1080/08941920.2012.656184>.
- Rainnie, A., Herod, A., & McGrath-Champ, S. 2011. Review and positions: Global production networks and labour. *Competition and Change*, 15(2): 155—169. <https://doi.org/10.1179/102452911X13025292603714>.
- Rao, E.J.O., & Qaim, M. 2011. Supermarkets, farm household income, and poverty: Insights from Kenya. *World Development*, 39(5): 784—796. <https://doi.org/10.1016/j.worlddev.2010.09.005>.
- Rapsoomanikis, G. 2015. *The economic lives of smallholder farmers: An analysis based on household data from nine countries*. Rome: FAO
- Reincke, K., Vilvert, E., Fasse, A., Graef, F., Sieber, S., & Lana, M.A. 2018. Key factors influencing food security of smallholder farmers in Tanzania and the role of cassava as a strategic crop. *Food Security*, 10: 911—924. <https://doi.org/10.1007/s12571-018-0814-3>.
- Resnik, D.B. 2011. What is ethics in research and why is it important? <http://www.niehs.nih.gov/research/resources/bioethics/whatis/>. (Accessed 15 September 2019).
- Ribeiro-Barros, A.I., Tevera, D.S., Goulao, L.F., & Tivana, L.D. (eds). 2022. *Food systems resilience. IntechOpen Series Sustainable Development, Volume, 1*. London: IntechOpen. <http://dx.doi.org/10.5772/intecopen.95206>.
- Ricciardi, V., Ramankutty, N., Mehrabi, Z., Jarvis, L., & Chookolingo, B. 2018. How much of the world's food do smallholders produce? *Global Food Security*, 17: 64—72. <https://doi.org/10.1016/j.gfs.2018.05.002>.
- Rigg, J. 2006. Land, farming, livelihoods, and poverty: Rethinking the links in the rural south. *World Development*, 34 (1): 180—202. <https://doi.org/10.1016/j.worlddev.2005.07.015>.
- Rigg, J., Nguyen, T.A., & Luong, T.T.H. 2014. The Texture of livelihoods: migration and making a living in Hanoi. *The Journal of Development Studies*, 50(3): 368—382. <https://doi.org/10.1080/00220388.2013.858130>.
- Riisgard, L., Bolwig, S., Matose, F., Ponte, S., du Toit, A., & Halberg, N. 2008. *A Strategic Framework and Toolbox for Action Research with Small Producers in Value Chains*. DIIS Working Paper no 2008/17. Danish Institute for International Studies, Copenhagen, 2008. <http://www.diis.dk/graphics/Publications/WP2008/WP08> (Accessed 12 September 2017).
- Rijn, F. van, Kuit, Y., Waarts, Y., & Ingram, V. 2015. *Cluster analysis among UTZ-certified cocoa farmers in Ghana and Ivory Coast*. Den Haag, LEI, Wageningen UR.
- RoG (Republic of Ghana). 2011. *National Policy on Public-Private Partnerships (PPP). Private participation in infrastructural and service for better public service delivery*. Government of Ghana/Ministry of Finance and Economic Planning, June 2011.

- RoG (Republic of Ghana). 2014. *Ghana Agriculture Sector Investment Programme (GASIP)*. Design completion report, February 2014.
- RoG (Republic of Ghana). 2017. *The Coordinated Programme for Economic and Social Development Policies (2017-2024). An agenda for jobs: Creating prosperity and equal opportunity for all*. Presented by Nana Addo Dankwa Akuffo-Addo, President of the Republic to the 7th Parliament of the 4th Republic, October 2017.
- Ros-Tonen, M.A.F., Van den Hombergh, H., & Zoomers, A. 2007. Partnerships for sustainable forest and tree resource management in Latin America: The new road towards successful forest governance? In Ros-Tonen (Ed.) *Partnerships in sustainable forest resource management: learning from Latin America*, pp. 3—35. Leiden: Brill.
- Ros-Tonen, M.A.F., van Leynseele, Y.-P.B., Laven, A., Sunderland, T. 2015. Landscapes of social inclusion: Inclusive value chain collaboration through the lenses of food sovereignty and landscape governance. *European Journal of Development Research*, 27(4): 523—540. <https://doi.org/10.1057/ejdr.2015.50>.
- Ros-Tonen, M.A.F., Bitzer, V., Laven, A., de Leth, D.O., Van Leynseele, Y., & Vos, A. 2019. Conceptualizing inclusiveness of smallholder value chain integration. *Current Opinion in Environmental Sustainability*, 41:10—17. <https://doi.org/10.1016/j.cosust.2019.08.006>.
- Roth, M., Antwi, Y., & O'Sullivan, R. 2017. *Land and natural resource governance and tenure for enabling sustainable cocoa cultivation in Ghana*. Washington, DC: USAID Tenure and Global Climate Change Program.
- Ruben, R. 2017. Impact assessment of commodity standards: towards inclusive value chains. *Enterprise Development and Microfinance*, 28(1-2): 82—97. <https://doi.org/10.3362/1755-1986.16-00020>.
- Ruf, F., Schroth, G., & Doffangui, K. 2015. Climate change, cocoa migrations and deforestation in West Africa: What does the past tell us about the future? *Sustainability Science*, 10, 101-111. <https://doi.org/10.1007/s11625-014-0282-4>.
- Ruben, R., van Berkum, S., Guijt, W. J., de Steenhuijsen Pijters, C.B., & Smaling, E.M.A. 2021. Transforming food systems: Pathways towards inclusive food system transformation (No. 2021-093). The Hague/Wageningen: Wageningen Economic Research.
- Ruf, F.O. 2010. “You weed, and we’ll share” Land sharing contracts and cocoa booms in Ghana, Cote d’Ivoire and Indonesia. Technical Report, March 2010. <https://doi.org/10.13140/RG.2.1.1327.4640>.
- Ruml, A., & Qaim, M. 2020. Effects of marketing contracts and resource-providing contracts in the African small farm sector: Insights from oil palm production in Ghana. *World Development*, 136 (2020):105110, pp. 1—12. <https://doi.org/10.1016/j.worlddev.2020.105110>.
- Ruml, A., Ragasa, C., & Qaim, M. 2020. *Heterogeneous effects of marketing contracts and resource-providing contracts on household income*. Global Food Discussion Paper 138, Goettingen: University of Goettingen.
- Runhaar, H., Dieperink C., & Driessen, P. 2006. Policy analysis for sustainable development. *International Journal of Sustainability in Higher Education*, 7: 34—56. <https://doi.org/10.1108/14676370610639236>.

- Said-Allsopp, M., & Tallontire, A. 2015. Pathways to empowerment?: Dynamics of women's participation in global value chains. *Journal of Cleaner Production*, 107: 114–121. <https://doi.org/10.1016/j.jclepro.2014.03.089>.
- Sallu, SM, Twyman, C & Stringer, L.C. 2010. Resilient or vulnerable livelihoods? Assessing livelihood dynamics and trajectories in rural Botswana. *Ecology and Society*, 15 (4): 1–34. <https://doi.org/10.5751/ES-03505-150403>.
- Sasu, D.D. 2022. Contribution of Cocoa to GDP in Ghana 2014-2025. May 2022. <https://www.statista.com/statistics/1235774/contribution-from-cocoa-sector-to-gdp-in-ghana/>. (Accessed 15 November 2022).
- Schelle, C., & Pokorny, B. 2021. How Inclusive Is Inclusive? A Critical Analysis of an Agribusiness Initiative in Kenya. *Sustainability*, 13: 10937, pp. 1–17. <https://doi.org/10.3390/su131910937>.
- Schoneveld, G.C., van der Haar, S., Ekowati, D., Andrianto, A., Komarudin, H., Okarda, B., Jelsma, I., & Pacheco, P. 2019. Certification, good agricultural practice and smallholder heterogeneity: Differentiated pathways for resolving compliance gaps in the Indonesian oil palm sector. *Global Environmental Change*, 57: 101933, pp. 1–18. <https://doi.org/10.1016/j.gloenvcha.2019.101933>.
- Schroth, G., Läderach, P., Martinez-Valle, A. I., Bunn, C., & Jassogne, L. 2016. Vulnerability to climate change of cocoa in West Africa: Patterns, opportunities and limits to adaptation. *Science of the Total Environment*, 556, 231–241. <https://doi.org/10.1016/j.scitotenv.2016.03.024>.
- Scoones, I. 1998. *Sustainable rural livelihoods: A framework for analysis*. IDS Working Paper 72. Brighton, UK: Institute of Development Studies, University of Sussex.
- Scoones, I. 2009. Livelihoods perspectives and rural development. *The Journal of Peasant Studies*, 36(1): 171–196, <https://doi.org/10.1080/03066150902820503>.
- Shukla, R., Agarwal, A., Gornott, C., Sachdeva, K., & Joshi, P.K. 2019. Farmer typology to understand differentiated climate change adaptation in Himalaya. *Scientific Reports*, 9: 20375. <https://doi.org/10.1038/s41598-019-56931-9>.
- Sibhatu, K.T., & Qaim, M. 2017. Rural food security, subsistence agriculture, and seasonality. *PLoS ONE*, 12: e0186406. <https://doi.org/10.1371/journal.pone.0186406>.
- Signorelli, S. 2016. *Typology characterization of farmers in West Africa*. Africa Rising. 9th March 2016. Africa RISING West Africa Review and Planning Meeting, Accra, 30 March–1 April 2016.
- Smith, S., & Sarpong, D.B. 2018. *Living income report- rural Ghana: Cocoa growing areas of Ashanti, Central, Eastern, and Western Regions*. Living Income Community of Practice, Series 1, Report XX, July 2018. Living Income Community of Practice.
- SPRING. 2018. *Developing a Seasonal Calendar: Session Guide Five of the Nutrition-Sensitive Agriculture Training Resource Package*. Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project, pp. 1–10.
- Stevens, J.P. 2009. *Applied multivariate statistics for the social sciences, 5th Edition*. Routledge, Taylor & Francis Group, New York, London.
- Stevens, C., Devereux, S., & Kennan, J. 2003. *International trade, livelihoods and food security in developing countries*. IDS Working Paper 215, Institute of Development Studies December 2003.

- Stratmon, D.L. 1959. The Ghana educational system. *Journal of Negro Education*, 28(4): 394—404. <https://doi.org/10.2307/2293596>.
- Steenhuijsen Piters, B. de., Nelson, J., Wennink, B., Ingram, V., Tondel, F., Kruijssen, F., & Aker, J. 2021. *West African food system resilience*. Wageningen, Wageningen Economic Research, Report 2021-006. Wageningen.
- Stoian, D., Donovan, J., Fisk, J. & Muldoon, M. 2012. Value chain development for rural poverty reduction: A reality check and a warning. *Enterprise Development & Microfinance*, 23(1): 54—69. <https://doi:10.3362/1755-1986.2012.006>.
- Swinnen, J.F., & Maertens, M. 2007. Globalization, privatization, and vertical coordination in food value chains in developing and transition countries. *Agricultural economics*, 37: 89—102. <https://doi.org/10.1111/j.1574-0862.2007.00237.x>.
- Swinnen, J., & Vandeplas, A. 2012. Rich consumers and poor producers: quality and rent distribution in global value chains. *Journal of Globalization and Development*, 2(2): 2012, pp. 1–20. <https://doi.org/10.1515/1948-1837.1036>.
- Takane, T. 2000. Incentives embedded in institutions: the case of share contracts in Ghanaian cocoa production. *The Developing Economies*, 38(3): 374—397. <https://doi:10.1111/j.1746-1049.2000.tb00883.x>.
- Teye, J.K., & Nikoi, E. 2021. *The political economy of the cocoa value chain in Ghana*. Agricultural Policy Research in Africa (APRA). Working paper (WP) 053, March 2021.
- Thorpe, J. & Maestre, M. 2015. *Brokering development: Enabling factors for public-private-producer partnerships in agricultural value chains*. Brighton: IDS and Rome: IFAD.
- Tobin, D., Glenna, L., & Devaux, A. 2016. Pro-poor? Inclusion and exclusion in native potato value chains in the central highlands of Peru. *Journal of Rural Studies*, 46: 71—80. <https://doi.org/10.1016/j.jrurstud.2016.06.002>.
- Ton, G., Hagelaar, G., Laven, A. & Vellema, S. 2008. *Chain governance, Sector Policies and Economic Sustainability in Cocoa: A Comparative Analysis of Ghana, Côte d'Ivoire, and Ecuador*. Markets, Chains and Sustainable Development Strategy & Policy paper #12. Wageningen: Wageningen UR.
- Ton, G., Vellema, W., Desiere, S., Weituschat, S., & D'Haese, M. 2018. Contract farming for improving smallholder incomes: What can we learn from effectiveness studies? *World Development*, 104: 46—64. <https://doi.org/10.1016/j.worlddev.2017.11.015>.
- Torero, M. 2011. *A framework for linking small farmers to markets*. Paper presented at the IFAD Conference on New Directions for Smallholder Agriculture 24-25 January 2011.
- Tsiboe, F., Dixon, B.L., Nalley, L.L., Popp, J.S., & Luckstead, J. 2016. Estimating the impact of farmer field schools in sub-Saharan Africa: the case of cocoa. *Agricultural Economics*, 47: 329–339. <https://doi.org/10.1111/agec.12233>.
- Tsitkata, D. 2009. Gender, land and labour relations and livelihoods in sub-Saharan Africa in the era of economic liberalization: Towards a research agenda. In Tsitkata, D., & Amanor-Wilks (eds): Land, Labour and Gendered Livelihoods. *Feminist Africa* 12: 11—30. <https://feministafrica.net/feminist-africa-issue-12-2009-land-labour-and-gendered-livelihoods/>. (Accessed 13 June 2016).

- Tsikata, D., & Amanor-Wilks, D.S. 2009. Editorial: Land and labour in gendered livelihood trajectories. In Tsikata, D., & Amanor-Wilks (eds): *Land, Labour and Gendered Livelihoods. Feminist Africa* 12:1-10. <https://feministafrica.net/feminist-africa-issue-12-2009-land-labour-and-gendered-livelihoods/>. (Accessed 13 June 2016)
- Tyszler, M., Bymolt, R., & Laven, A. 2018. *Analysis of the income gap of cocoa producing households in Ghana: Comparison of actual incomes with the Living Income Benchmark*. Prepared for the Living Income Community of Practice. The Royal Tropical Institute (KIT).
- Tyszler, M., de los Rios, C., Audet-Bélangier, G., & Laven, A. 2020. Guidance manual on calculating and visualizing the income gap to a living. The Royal Tropical Institute (KIT).
- UDEMA (Upper Denkyira East Municipal Assembly). 2014. *Annual progress report (APR) 2013*. Municipal planning coordinating unit, January 2014. https://s3.amazonaws.com/ndpc-static/pubication/CR-+Upper+Denkyira+East+Municipal_2013_APR.pdf. (Accessed 18 April 2016).
- United Nations. 2015. *Sustainable Development Goals*. United Nations Department of Economic and Social Affairs. <https://sdgs.un.org/goals>. (Accessed 05 June 2022).
- UNCTAD (United Nations Conference on Trade and Development). 2008. *Cocoa Study: Industry Structures and Competition*. New York/Geneva: UNCTAD Secretariat.
- UNDP (United Nations Development Programme). 2012. Environmental sustainability and policy for cocoa production in Ghana. Project document, 30th August 2012.
- UTZ Certified. 2015. *Core code of conduct version 1.0*. UTZ certified certification documents. <https://utzcertified.org/en/mediacenter/certification-documents>. (Accessed 21 June 2015).
- Valbuena, D., Groot, J.C.J., Mukalama, J., Gerard, B., & Tittonell, P. 2015. Improving rural livelihoods as a “moving target”: Trajectories of change in smallholder farming systems of Western Kenya. *Reg Environ Change*, 15: 1395—1407. <https://doi.org/10.1007/s10113-014-0702-0>.
- Vamuloh, V.V., Kozak, R.A., & Panwar, R. 2020. Voices unheard: Barriers to and opportunities for small farmers’ participation in oil palm contract farming. *Journal of Cleaner Production*, 275 (2020) 121955: 2—13. <https://doi.org/10.1016/j.jclepro.2020.121955>.
- Van Ewijk, E. Ataa-Asantewaa, M., Asubonteng, K.O., Van Leynseele, Y., Derkyi, M., Laven, A., & Ros-Tonen, M. (under review). Farmer-centred multi-stakeholder platforms: From iterative approach to conceptual embedding. *Journal of the Knowledge Economy*, JKEC-D-22-00980.
- Van der Ploeg, J.D. 2014. Peasant-driven agricultural growth and food sovereignty. *Journal of Peasant Studies*, 41(6): 999—1030. <https://doi.org/10.1080/03066150.2013.876997>.
- van der Ven, H., Sun, Y., Cashore, B. 2021. Sustainable commodity governance and the global south. *Ecological Economics*, 186 (2021): 107062, pp. 1—7. <https://doi.org/10.1016/j.ecolecon.2021.107062>.
- van Paassen, A., Osei-Amponsah, C., Klerkx L., van Mierlo, B. & Essegbey, G.O. 2022. Partnerships blending institutional logics for inclusive global and regional food value chains in Ghana; with what smallholder effect? *The European Journal of Development Research*, 34: 2179—2203. <https://doi.org/10.1057/s41287-022-00530-4>
- Van Vliet, M., & Kok, K., 2015. Combining backcasting and exploratory scenarios to develop robust water strategies in the face of uncertain futures. *Mitig Adapt Strateg Glob Change*, 20: 43—74. <https://doi.10.1007/s11027-013-9479-6>.

- van Vliet, J.A., Slingerland, M.A., Waarts, Y.R., & Giller, K.E. 2021. A living income for cocoa producers in cote d'Ivoire and Ghana?- *Frontier for Sustainable Food Systems*, 5: 732831, pp. 1—19. <https://doi.org/10.3389/fsufs.2021.732831>.
- van Vuuren, D.P., Zimm, C., Busch, S., Krieglger, E., Leininger, J., Messner, D., Nakicenovic, N., Rockstrom, J., Riahi, K., Sperling, F., Bosetti, V., Cornell, S., Gaffney, O., Lucas, P.L., Popp, A., Ruhe, C., Armin von Schiller, A., Schmidt, J.O., & Soergel, B. 2022. Defining a sustainable development target space for 2030 and 2050. *One Earth*, 5: 142—156. <https://doi.org/10.1016/j.oneear.2022.01.003>.
- Väth, S., & Kirk, M. 2011. *Linkages between investors and the local population: Evidence from the oil palm sector in Ghana*. Paper presented at the annual World Bank Conference on Land and Poverty, 18-20 April, 2011. <http://siteresources.worldbank.org/INTIE/Resources/475495-1302790806106/CHA4Paper2VathKirk.pdf>. (Accessed 22 July 2017).
- Vellema, S., Ton, G., de Roo, N., & van Wijk, J. 2013. Value chains, partnerships and development: Using case studies to refine programme theories. *Evaluation*, 19(3): 304—320. <https://doi.org/10.1177/1356389013493841>.
- Vellema, S., & Van Wijk, J. 2015. Partnerships intervening in global food chains: The emergence of co-creation in standard-setting and certification. *Journal of Cleaner Production*, 107: 105—133. <http://dx.doi.org/10.1016/j.jclepro.2014.03.090>.
- Vermuelen, S. & Cotula, L. 2010. *Making the most of agricultural investment: A survey of business models that provide opportunities for smallholders*. IIED/FAO/IFAD/SDC, London/Rome/Bern.
- Via Campesina. 2007. Nyéléni declaration. Sélingué, Mali: Forum for Food Sovereignty in
- Patel, R. 2009. Food sovereignty, *The Journal of Peasant Studies*, 36: 663—706. <https://doi.org/10.1080/03066150903143079>.
- Vicol, M., Neilson, J., Hartatri, D. F. S., & Cooper, P. 2018. Upgrading for whom? Relationship coffee, value chain interventions and rural development in Indonesia. *World Development*, 110: 26—7. <https://doi.org/10.1016/j.worlddev.2018.05.020>.
- Vorley, B., del Pozo-Vergnes, E., & Barnett, A. 2012. Small producer agency in the globalised market: making choices in a changing world. London, The Hague: IIED, HIVOS.
- Vos, A.A. 2017. Getting her money's worth? An Exploration of Women's Integration in the Palm Oil Value Chain and the Effects on their Household Food Security. Research Masters dissertation, International Development Studies, University of Amsterdam.
- Waarts, Y., Janssen, V., Aryeetey, R., Onduru, D., Heriyanto, D., Aprillya, S.T., N'Guessan, A., Courbois, L., Bakker, D., & Ingram, V. 2022. *How can different types of smallholder commodity farmers be supported to achieve a living income?* Papers of the 2021 Rural Development Report. IFAD Research Series 80, IFAD 2022.
- Waha, K., Van Wijk, M.T., Fritz, S., See, L., Thornton, P.K., Wichern, J., Herrero, M. 2018. Agricultural diversification as an important strategy for achieving food security in Africa. *Global Change Biology*, 24: 3390—3400. <https://doi.org/10.1111/gcb.14158>.
- Wangle, J. 2011. Exploring social structures and agency in backcasting studies for sustainable development. *Technological Forecasting and Social Change*, 78(5): 872—882. <https://doi.org/10.1016/j.techfore.2011.03.007>.

- Warungu, J. 2017. Letters from Africa: Ghana's street lawyers dispense instant justice BBC News, 13 November 2017. <https://www.bbc.com/news/world-africa-4190144>. (Accessed 6 August 2020).
- West, C.T. 2013. Documenting livelihood trajectories in the context of development interventions in northern Burkina Faso. *Journal of Political Ecology*, 20 (2013): 342—360. <https://doi.org/10.2458/v20i1.21750>.
- WEF (World Economic Forum). 2022. *Why smallholder farmers are central to new food security interventions*. 28 September 2022. <https://www.weforum.org/agenda/2022/09/smallholder-farmers-key-achieving-foodsecurity/#:~:text=The%20600%20million%20smallholder%20farmers,24%25%20of%20gross%20agricultural%20area>. (Accessed 8 January 2023)
- WFP(World Food Programme). 2013. *Comprehensive food security and vulnerability analysis. Tanzania 2012*. Rome: World Food Programme. <https://reliefweb.int/report/united-republic-tanzania/comprehensive-food-security-and-vulnerability-analysis-tanzania-2012>. (Accessed 16 April 2020).
- Windfuhr, M., & Jonsén, J. 2005. *Food Sovereignty: Towards Democracy in Localized Food Systems*. Warwickshire, UK: ITDG Publishing. <http://www.ukabc.org/foodsovpaper.htm>. (Accessed 14 April 2015).
- World Bank. 2007. *World Development Report 2008: Agriculture for Development*. Washington DC: World Bank. <https://doi.org/10.1111/1468-005X.00051>.
- World Bank. 2018. Third Ghana economic update: agriculture as an engine of growth and jobs creation, World Bank. Washington, DC.
- World Bank. 2022. Agriculture, forestry, and fishing, value added (% of GDP) – Ghana. World Bank national accounts data, and OECD National Accounts data files. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=GH>. (Accessed 5 May 2022).
- Woodhill, J., Guijt, J., Wegner, L. & Sopov, M. 2012. *From islands of success to seas of change: a report on scaling inclusive agri-food markets*. Wageningen, The Netherlands: Wageningen UR Centre for Development Innovation.
- Woodhill, J. 2016. *Inclusive agribusiness – the state of play*. Bonn, Germany: Global Donor Platform for Rural Development.
- Woodhill, J., Hasnain, S., & Griffith, A. 2020. *Farmers and food systems: What future for small-scale agriculture?* Environmental Change Institute, University of Oxford, Oxford.
- Woodhill, J., Kishore, A., Njuki, J., Jones, K., & Hasnain, S. 2022. *Food systems and rural wellbeing: challenges and opportunities*. Papers of the 2021 Rural Development Report. IFAD Research Series 73, 2022.
- Yin, R. 2009. *Case study research design and methods*, (4th Edition, Applied social research methods series vol. 5) LA, USA: SAGE publishers.
- Zhang, Q.F. 2015. Class differentiation in rural China: Dynamics of accumulation, commodification and state intervention. *Journal of Agrarian Change*, 15: 338—36. <https://doi.org/10.1111/joac.12120>.

- Zimmerer, K.S. 2007. Agriculture, livelihoods, and globalization: The analysis of new trajectories (and avoidance of just-so stories) of human-environment change and conservation. *Agriculture and Human Values*, 24: 9—16. <https://doi.10.1007/s10460-006-9028-y>.
- Zimmerer, K., Lambin, E., & Vanek, S. 2018. Smallholder telecoupling and potential sustainability. *Ecology and Society*, 23(1): 30, pp. 1—17. <https://doi.org/10.5751/ES-09935-230130>.