References

Agarwal, Ravinder; Awasthi, Amit; Singh, Nirankar; Gupta, Prabhat Kumar; Mittal, Susheel K. (2012): Effects of exposure to rice-crop residue burning smoke on pulmonary functions and oxygen saturation level of human beings in Patiala (India). In *The Science of the Total Environment* 429, pp. 161–166. DOI: 10.1016/j.scitotenv.2012.03.074.

Awasthi, Amit; Singh, Nirankar; Mittal, Susheel; Gupta, Prabhat K.; Agarwal, Ravinder (2010): Effects of agriculture crop residue burning on children and young on PFTs in North West India. In *The Science of the Total Environment* 408 (20), pp. 4440–4445. DOI: 10.1016/j.scitotenv.2010.06.040.

Balakrishnan, Kalpana; Ghosh, Santu; Thangavel, Gurusamy; Sambandam, Sankar; Mukhopadhyay, Krishnendu; Puttaswamy, Naveen et al. (2018): Exposures to fine particulate matter (PM2. 5) and birthweight in a rural-urban, mother-child cohort in Tamil Nadu, India. In *Environmental research* 161, pp. 524–531. DOI: 10.1016/j.envres.2017.11.050.

Balwinder-Singh; McDonald, Andrew J.; Srivastava, Amit K.; Gerard, Bruno (2019): Tradeoffs between groundwater conservation and air pollution from agricultural fires in northwest India. In *Nature Sustainability* 2 (7), pp. 580–583. DOI: 10.1038/s41893-019-0304-4.

Baum, Christopher F.; Schaffer, Mark E.; Stillman, Steven (2003): Instrumental variables and GMM: Estimation and testing. In *The Stata Journal* 3 (1), pp. 1–31.

Bhatt, Rajan; Kukal, Surinder Singh (2017): Tillage and establishment method impacts on land and irrigation water productivity of wheat–rice system in North-West India. In *Experimental Agriculture* 53 (2), pp. 178–201. DOI: 10.1017/S0014479716000272.

Borsdorff, Tobias; aan de Brugh, Joost; Hu, Haili; Hasekamp, Otto; Sussmann, Ralf; Rettinger, Markus et al. (2018): Mapping carbon monoxide pollution from space down to city scales with daily global coverage. In *Atmospheric Measurement Techniques* 11 (10), pp. 5507–5518. DOI: 10.5194/amt-11-5507-2018.

Bosma, Roel; Kaymak, Uzay; van den Berg, Jan; Udo, Henk; Verreth, Johan (2011): Using fuzzy logic modelling to simulate farmers' decision-making on diversification and integration in the Mekong Delta, Vietnam. In *Soft Computing* 15 (2), pp. 295–310. DOI: 10.1007/s00500-010-0618-7.

Bosma, Roel H. (2007): Using fuzzy logic models to reveal farmers' motives to integrate livestock, fish, and crops. PhD. Wageningen University, Wageningen, NL.

Burke, William J.; Jayne, Thom. S.; Black, J. Roy (2017): Factors explaining the low and variable profitability of fertilizer application to maize in Zambia. In *Agricultural Economics* 48 (1), pp. 115–126. DOI: 10.1111/agec.12299.

Chakrabarti, Suman; Khan, Mohammed Tajuddin; Kishore, Avinash; Roy, Devesh; Scott, Samuel P. (2019): Risk of acute respiratory infection from crop burning in India: Estimating disease burden and economic welfare from satellite and national health survey data for 250 000 persons. In *International Journal of Epidemiology* 48 (4), pp. 1113–1124. DOI: 10.1093/ije/dyz022.

Dekker, Iris N.; Houweling, Sander; Pandey, Sudhanshu; Krol, Maarten; Röckmann, Thomas; Borsdorff, Tobias et al. (2019): What caused the extreme CO concentrations during the 2017 high-pollution episode in India? In *Atmospheric Chemistry and Physics* 19 (6), pp. 3433–3445. DOI: 10.5194/acp-19-3433-2019.

Di Falco, S.; Veronesi, M.; Yesuf, M. (2011): Does adaptation to climate change provide food security? A micro-perspective from Ethiopia. In *American Journal of Agricultural Economics* 93 (3), pp. 829–846. DOI: 10.1093/ajae/aar006.

Duflo, E.; Pande, R. (2007): Dams. In *The Quarterly Journal of Economics* 122 (2), pp. 601–646. DOI: 10.1162/qjec.122.2.601.

Eldering, A.; Boland, S.; Solish, B.; Crisp, D.; Kahn, P.; Gunson, M. (2012): High precision atmospheric CO2 measurements from space: The design and implementation of OCO-2. In *IEEE Aerospace Conference, Big Sky, Montana*. DOI: 10.1109/AERO.2012.6187176.

Erenstein, O.; Laxmi, V. (2008): Zero tillage impacts in India's rice–wheat systems: A review. In *Soil and Tillage Research* 100 (1-2), pp. 1–14. DOI: 10.1016/j.still.2008.05.001.

Gadde, Butchaiah; Bonnet, Sébastien; Menke, Christoph; Garivait, Savitri (2009): Air pollutant emissions from rice straw open field burning in India, Thailand and the Philippines. In *Environmental Pollution* 157 (5), pp. 1554–1558. DOI: 10.1016/j.envpol.2009.01.004.

Glover, Dominic; Sumberg, James; Andersson, Jens A. (2016): The adoption problem: or why we still understand so little about technological change in African agriculture. In *Outlook on Agriculture* 45 (1), pp. 3–6. DOI: 10.5367/oa.2016.0235.

Guttikunda, Sarath K.; Jawahar, Puja (2014): Atmospheric emissions and pollution from the coal-fired thermal power plants in India. In *Atmospheric Environment* 92, pp. 449–460. DOI: 10.1016/j.atmosenv.2014.04.057.

Hayashi, Kentaro; Ono, Keisuke; Kajiura, Masako; Sudo, Shigeto; Yonemura, Seiichiro; Fushimi, Akihiro et al. (2014): Trace gas and particle emissions from open burning of three cereal crop residues: Increase in residue moistness enhances emissions of carbon monoxide, methane, and particulate organic carbon. In *Atmospheric Environment* 95, pp. 36–44. DOI: 10.1016/j.atmosenv.2014.06.023.

Jain, Meha; Srivastava, Amit; Balwinder-Singh; Joon, Rajiv; McDonald, Andrew; Royal, Keitasha et al. (2016): Mapping smallholder wheat yields and sowing dates using micro-satellite data. In *Remote Sensing* 8 (10), p. 860. DOI: 10.3390/rs8100860.

Jat, H. S.; Datta, Ashim; Sharma, P. C.; Kumar, Virender; Yadav, A. K.; Choudhary, Madhu et al. (2018): Assessing soil properties and nutrient availability under conservation agriculture practices in a reclaimed sodic soil in cereal-based systems of North-West India. In *Archiv fur Acker- und Pflanzenbau und Bodenkunde* 64 (4), pp. 531–545. DOI: 10.1080/03650340.2017.1359415.

Kaskaoutis, D. G.; Kumar, S.; Sharma, D.; Singh, R. P.; Kharol, S. K.; Sharma, M. et al. (2014): Effects of crop residue burning on aerosol properties, plume characteristics, and long-range transport over northern India. In *J. Geophys. Res. Atmos.* 119 (9), pp. 5424–5444. DOI: 10.1002/2013JD021357.

Kaur, Amandeep; Rani, Jyoti (2016): An approach to detect stubble burned areas in Punjab by digitally analyzing satellite images. In *Journal for Research* 2 (6), pp. 64–69.

Kosmowski, Frédéric; Stevenson, James; Campbell, Jeff; Ambel, Alemayehu; Haile Tsegay, Asmelash (2017): On the ground or in the air? A methodological experiment on Crop residue cover measurement in Ethiopia. In *Environmental Management* 60 (4), pp. 705–716. DOI: 10.1007/s00267-017-0898-0.

Lipscomb, Molly; Mobarak, A. Mushfiq; Barham, Tania (2013): Development effects of electrification: Evidence from the topographic placement of hydropower plants in Brazil. In *American Economic Journal: Applied Economics* 5 (2), pp. 200–231. DOI: 10.1257/app.5.2.200.

Liu, K. (2009): A qualitative decision support for environmental impact assessment using Fuzzy Logic. In *Journal of Environmental Informatics* 13 (2), pp. 93–103. DOI: 10.3808/jei.200900144.

Liu, Tianjia; Marlier, Miriam; Karambelas, Alexandra; Jain, Meha; Singh, Sukhwinder; Singh, Manoj et al. (2019): High-resolution hybrid MODIS-Landsat estimation of post-monsoon agricultural burned area in northwestern India. In *EarthArXiv* 1 (011007).

Mishra, Amit Kumar; Shibata, Takashi (2012): Synergistic analyses of optical and microphysical properties of agricultural crop residue burning aerosols over the Indo-Gangetic Basin (IGB). In *Atmospheric Environment* 57, pp. 205–218. DOI: 10.1016/j.atmosenv.2012.04.025.

Mittal, Susheel K.; Singh, Nirankar; Agarwal, Ravinder; Awasthi, Amit; Gupta, Prabhat K. (2009): Ambient air quality during wheat and rice crop stubble burning episodes in Patiala. In *Atmospheric Environment* 43 (2), pp. 238–244. DOI: 10.1016/j.atmosenv.2008.09.068.

NAAS (2017): Innovative viable solution to rice residue burning in rice-wheat cropping system through concurrent use of super straw management system-fitted combines and Turbo Happy Seeder. Policy Brief No. 2. National Academy of Agricultural Sciences. New Delhi, India. Available online at http://naasindia.org/documents/CropBurning.pdf, checked on 12/3/2019.

Nunn, Nathan; Wantchekon, Leonard (2011): The slave trade and the origins of mistrust in Africa. In *American Economic Review* 101 (7), pp. 3221–3252.

Pant, Pallavi; Guttikunda, Sarath K.; Peltier, Richard E. (2016): Exposure to particulate matter in India: A synthesis of findings and future direction. In *Environmental research* 147, pp. 480–496. DOI: 10.1016/j.envres.2016.03.011.

Peter, Gregory; Bell, Michael M.; Jarnagin, Susan; Bauer, Donna (2000): Coming back across the fence: Masculinity and the transition to sustainable agriculture. In *Rural Sociology* 65 (2), pp. 215–233.

Pillai, D.; Gerbig, C.; Kretschmer, R.; Beck, V.; Karstens, U.; Neininger, B.; Heimann, M. (2012): Comparing Lagrangian and Eulerian models for CO 2 transport – a step towards Bayesian inverse modeling using WRF/STILT-VPRM. In *Atmospheric Chemistry and Physics* 12 (19), pp. 8979–8991. DOI: 10.5194/acp-12-8979-2012.

Roodman, David (2011): Fitting fully observed recursive mixed-process models with cmp. In *The Stata Journal* 11 (2), pp. 159–206.

Rozemeijer, N. C.; Kleipool, Q. (2018): S5P Mission Performance Centre Level 1b Readme, Reference: S5P-MPC-KNMI-PRF-L1B, Issue: 1.0.0, Product Version: V01.00.00, https://sentinel.esa.int/documents/247904/3541451/Sentinel-5P-Level-1b-Product-Readme-File.

Safi, M. (2016): Indian government declares Delhi air pollution an emergency. In *The Guardian* 6 November, checked on 3 December, 2019.

Sapkota, Tek B.; Jat, M. L.; Aryal, Jeetendra P.; Jat, R. K.; Khatri-Chhetri, Arun (2015): Climate change adaptation, Greenhouse Gas mitigation and economic profitability of conservation agriculture: Some examples from cereal systems of Indo-Gangetic Plains. In *Journal of Integrative Agriculture* 14 (8), pp. 1524–1533. DOI: 10.1016/S2095-3119(15)61093-0.

Sapkota, Tek B.; Vetter, Sylvia H.; Jat, M. L.; Sirohi, Smita; Shirsath, Paresh B.; Singh, Rajbir et al. (2019): Cost-effective opportunities for climate change mitigation in Indian agriculture. In *The Science of the Total Environment* 655, pp. 1342–1354. DOI: 10.1016/j.scitotenv.2018.11.225.

Sarkar, S.; Singh, R. P.; Chauhan, A. (2018): Crop residue burning in northern India: Increasing threat to greater India. In *Journal of Geophysical Research: Atmospheres* 123 (13), pp. 6920–6934. DOI: 10.1029/2018JD028428.

Shyamsundar, P.; Springer, N. P.; Tallis, H.; Polasky, S.; Jat, M. L.; Sidhu, H. S. et al. (2019): Fields on fire: Alternatives to crop residue burning in India. In *Science (New York, N.Y.)* 365 (6453), pp. 536–538. DOI: 10.1126/science.aaw4085.

Sidhu, H. S.; Singh, Manpreet; Singh, Yadvinder; Blackwell, J.; Lohan, Shiv Kumar; Humphreys, E. et al. (2015): Development and evaluation of the Turbo Happy Seeder for sowing wheat into heavy rice residues in NW India. In *Field Crops Research* 184, pp. 201–212. DOI: 10.1016/j.fcr.2015.07.025.

Streets, D. G.; Yarber, K. F.; Woo, J.-H.; Carmichael, G. R. (2003): Biomass burning in Asia: Annual and seasonal estimates and atmospheric emissions. In *Global Biogeochem. Cycles* 17 (4), n/a-n/a. DOI: 10.1029/2003GB002040.

Yokota, T.; Yoshida, Y.; Eguchi, N.; Ota, Y.; Tanaka, T.; Watanabe, H.; Maksyutov, S. (2009): Global Concentrations of CO2 and CH4 Retrieved from GOSAT. First Preliminary Results. In *Sola* 5, pp. 160–163. DOI: 10.2151/sola.2009-041.

Zeng, Di; Alwang, Jeffrey; Norton, George W.; Shiferaw, Bekele; Jaleta, Moti; Yirga, Chilot (2017): Agricultural technology adoption and child nutrition enhancement: Improved maize varieties in rural Ethiopia. In *Agricultural Economics* 48 (5), pp. 573–586.