| #ID | Tool | Tier 1 Category | Tier 2 Category | Tier 3 Category | Tier 4 Category | References |
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| 82 | SALCA-SILAS Integration (Swiss Agricultural Life Cycle Assessment / Swiss Agricultural Sector Forecasting System) | Flow models | Multi-Criteria Assessment | Analytical | - | Zimmermann, A., Baumgartner, D., Nemecek, T., & Gaillard, G. Are public payments for organic farming cost-effective? Combining a decision-support model with LCA. *International Journal of Life Cycle Assessment*, **16(6)**, 548–560; https://doi.org/10.1007/s11367-011-0286-6 (2011). |
| 83 | Systems Analysis and Conceptual System Dynamics Model of the Livestock-derived Food System in South Africa | Flow models | Multi-Criteria Assessment | Analytical | - | Queenan, K., et al. A systems analysis and conceptual system dynamics model of the livestock-derived food system in South Africa: A tool for policy guidance. *Journal of Agriculture Food Systems and Community Development*, **9(4)**, 275-298; doi: 10.5304/jafscd.2020.094.021 (2020). |
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| 85 | TOPSIS (Technique for Order Preference by Similarity to Ideal Solution) | Flow models | Multi-Criteria Assessment | Decision making | - | Ardakani, Z., Bartolini, F., Brunori, G. Food and Nutrition Security in Iran: Application of TOPSIS Technique. *New Medit*, **16(1)**, 18–28 (2017). |
| 86 | Vessel authorisation and traceability audits | Flow models | Multi-Criteria Assessment | Analytical | - | Food and Agriculture Organization of the United Nations. Annual Report. *Report* at https://www.fao.org/publications/home/fao-flagship-publications/the-state-of-world-fisheries-and-aquaculture/2022/en (2022). |
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| 88 | Hazardous Extremes for Risk Assessment (HERA) | Flow models | Hazard Assessments | Multi-Hazard Assessment | - | Convergence of Climate-Health-Vulnerabilities. Hazardous Extremes for Risk Assessment (HERA) Tool. *Tool platform* at https://convergence.unc.edu/tools/hera/ (2022). |
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| 159 | Risk/risk-based assessment | Flow models | Hazard Assessments | Multi-Hazard Assessment | - | van Asselt, E. D., Memissen, M. P. M., van Asseldonk, M. A. P. M., Teeuw, J., van der Fels-Klerx, H. J. Selection of critical factors for identifying emerging food safety risks in dynamic food production chains. *Food Control*, **21(6)**, 919–926; https://doi.org/10.1016/j.foodcont.2009.12.010 (2010). Ross, T., Sumner, J. A simple, spreadsheet-based, food safety risk assessment tool. *International Journal of Food Microbiology*, **77(1–2)**, 39–53; https://doi.org/10.1016/S0168-1605(02)00061-2 (2002). |
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| 161 | Vulnerability index | Flow models | Hazard Assessments | Multi-Hazard Assessment | - | Yeni, F., Alpas, H. Vulnerability of global food production to extreme climatic events. *Food Research International*, **96**, 27–39. https://doi.org/10.1016/j.foodres.2017.03.020 (2017). |
| 162 | E3ME | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Mercure et al. Environmental impact assessment for climate change policy with the simulation-based integrated assessment model E3ME-FTT-GENIE. *Energy Strategy Reviews*, **20**, 195-208; doi:10.1016/j.esr.2018.03.003 (2018). |
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| 166 | Tool for Sustainability Impact Assessment of forest-wood-chains (ToSIA) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Lindner, M. et al. ToSIA—A tool for sustainability impact assessment of forest-wood-chains. *Ecological Modelling*, **221(18)**, 2197-2205; https://doi.org/10.1016/j.ecolmodel.2009.08.006 (2010). |
| 167 | Tool for Reduction and Assessment of Chemicals and Other Environmental Impacts (TRACI) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | European Commission. ILCD Handbook: Analysing of existing Environmental Impact Assessment methodologies for use in Life Cycle Assessment. Joint Research Centre, Institute for Environment and Sustainability. Background document, First Edition; https://eplca.jrc.ec.europa.eu/uploads/ILCD-Handbook-LCIA-Background-analysis-online-12March2010.pdf (2010). |
| 168 | Methodology Study Eco-design of Energy-using Products (MEEu | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | European Commission. ILCD Handbook: Analysing of existing Environmental Impact Assessment methodologies for use in Life Cycle Assessment. Joint Research Centre, Institute for Environment and Sustainability. Background document, First Edition; https://eplca.jrc.ec.europa.eu/uploads/ILCD-Handbook-LCIA-Background-analysis-online-12March2010.pdf (2010). |
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| 173 | Indicateurs de Durabilité des Exploitations Agricoles (IDEA) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | [illegible] (Morocco). In Proceedings of the *IFSA: Social and Technological Transformation of Farming Systems: Diverging and Converging Pathways*, Newport, UK; https://www.researchgate.net/publication/321585757_Assessing_Family_Farm_Sustainability_using_the_IDEA_method_in_the_Sais_plain_Morocco |
| 174 | Sustainability Assessment of Farming and the Environment (SAFE) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Van Cauwenbergh, N., Biala, K., Bielders, C., Brouckaert, V., Franchois, L., Garcia Cidad, V., Peeters, A. SAFE—A hierarchical framework for assessing the sustainability of agricultural systems. *Agriculture Ecosystems & Environment*, **120(2-4)**, 229–242; DOI: 10.1016/j.agee.2006.09.006 (2007). |
| 175 | Sustainability Assessment of Food and Agriculture systems (SAFA) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Butti Al Shamsi, K., Guarnaccia, P., Cosentino, S., L., Leonardi, C., Caruso, P., Stella, G., Timpanaro, G. Analysis of Relationships and Sustainability Performance in Organic Agriculture in the United Arab Emirates and Sicily (Italy). *Resources*, **8(1)**, 39; https://doi.org/10.3390/resources8010039 (2019). |
| 176 | Analysis of Farm Technical Efficiency and Impacts on Environmental and Economic Sustainability (SOSTARE) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Paracchini, M.,L. et al. A diagnostic system to assess sustainability at a farm level: The SOSTARE model. *Agricultural Systems*, **133**, 35–53; https://doi.org/10.1016/j.agsy.2014.10.004 (2015). |
| 177 | Monitoring Tool for Integrated Farm Sustainability (MOTIFS) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Meul, M., van Passel, S., Nevens, F., Dessein, J.; Rogge, E.; Mulier, A.; van Hauwermeiren, A. MOTIFS: A monitoring tool for integrated farm sustainability. *Agronomy for Sustainable Development*, **28**, 321–332 (2008). |
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| 179 | Problem-oriented Status-Driver Composite Indicator-base Framework of Agricultural Sustainability Assessment (PSDCIFASA) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Alipour, S.F., Boshrabadi, H.M., Mehrjerdi, M.R.Z., Hayati, D. Framework for Empirical Assessment of Agricultural Sustainability: The Case of Iran. *Sustainability*, **10**, 4823 (2018). |
| 180 | SEAMLESS: System for Environmental and Agricultural Modelling, Linking European Science and Society | Scope models | Economic models | Cost-benefit models | Impact Models | Van Ittersum, M.K. et al. Integrated assessment of agricultural systems-A component-based framework for the European Union (SEAMLESS). Agriultural Systems, **96(1-3)**, 150–165 (2008). |
| 181 | Evaluating the Sustainability of Complex Socio-environmental Systems (MESMIS) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | López-Ridaura, S., Masera, O., Astier, M. Evaluating the sustainability of complex socio-environmental systems. the MESMIS framework. *Ecological Indicators*, **2(1)**, 135–148 (2002). |

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| 182 | SRP (Sustainable Rice Platform, Bangkok, Thailand) | Flow models | Environmental Systems Appr | Multi-Indicator Assessments | Impact Models | Demont, M., Rutsaert, P. Restructuring the Vietnamese rice sector: Towards in-creasing sustainability. *Sustainability*, **9**, 325 (2017). |
| 183 | Global Biodiversity Score (GBS) | Flow models | Environmental Systems Appr | Single-Indicator Assessments | Impact Models | CDC Biodiversite. Global Biodiversity Score : update 2021. *Report* at https://www.cdc-biodiversite.fr/publications/global-biodiversity-score-update2021-cahier18/ (2021). |
| 184 | Agrobiodiversity Index | Flow models | Environmental Systems Appr | Single-Indicator Assessments | Impact Models | Jones, S.K. et al. Agrobiodiversity Index scores show agrobiodiversity is underutilized in national food systems. *Nature Food*, **2**, 712–723; https://doi.org/10.1038/s43016-021-00344-3 (2021). |
| 185 | Biodiversity Footprint for Financial Institutions | Flow models | Environmental Systems Appr | Single-Indicator Assessments | Impact Models | Lammerant, J., Driesen, K., Verhelst, J., De Ryck, J. Assessment of Biodiversity Measurement Apporaches for Businesses and Financial Institutions - Update 4. *Report* at https://ec.europa.eu/environment/biodiversity/business/assets/pdf/2022/Update%20Report%204_Final.pdf (2018). |
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| 187 | Biodiversity Monitoring System for the Food Sector | Flow models | Environmental Systems Appr | Single-Indicator Assessments | Impact Models | Lammerant, J., Driesen, K., Verhelst, J., De Ryck, J. Assessment of Biodiversity Measurement Apporaches for Businesses and Financial Institutions - Update 4. *Report* at https://ec.europa.eu/environment/biodiversity/business/assets/pdf/2022/Update%20Report%204_Final.pdf (2018). |
| 188 | LIFE Key Metrics | Flow models | Environmental Systems Appr | Single-Indicator Assessments | Impact Models | Arcadis, ECF, European Commission, Business@Biodiversity. Biodiversity Measurement Approaches – Summary descriptions. LIFE Key. *Methodology Report* at https://ec.europa.eu/environment/biodiversity/business/assets/pdf/tool-descriptions/LIFE%20summary%20description.pdf (2021). |