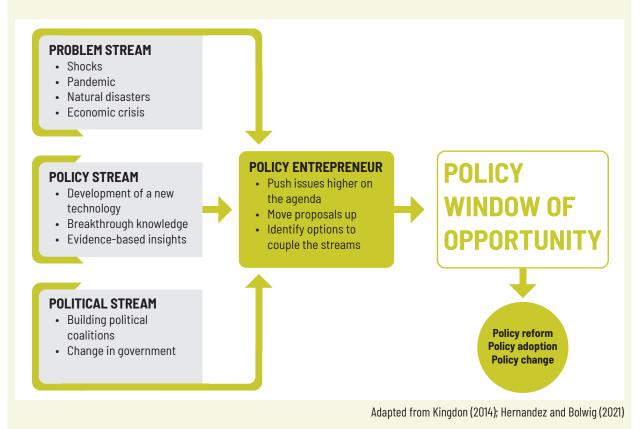
Case study 5: Policy windows for the environment - tips for improving scientific knowledge acceptance

Rose et al. (2020) sought to determine whether the responses of scientists, NGO staff, conservation policymakers, and others could be used to influence environmental policy. The study found four strategies environmentalists can use to respond to opportunities for creating successful policies.

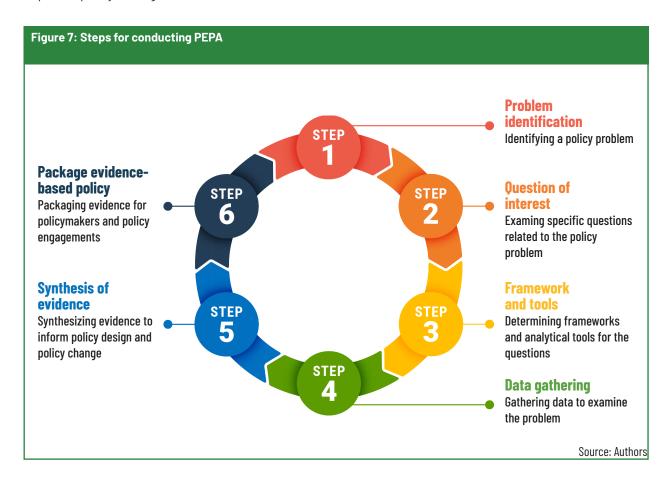
This framework found that it is possible to achieve conservation objectives if stakeholders: 1) know the emergent opportunities, 2) respond quickly to them, 3) frame their research in line with appropriate windows, and 4) persevere to guide policy processes through development to successful implementation. The Policy Windows framework has been instrumental in exploring soft power from new academic perspectives and in considering how a crisis may prove useful to scientists. This framework provides evidence that is relevant to achieve real policy change, actors must establish political alliances, build coalitions, and gain credibility with decision-makers (Rose et al., 2020).



5

Steps for conducting Political Economy and Policy Analysis (PEPA)

The PEPA Sourcebook provides an easily accessible compendium of political economy and policy analysis frameworks, analytical tools, and related case studies relevant to examining agri-food systems. As illustrated by Figure 7, PEPA follows an incremental and iterative approach to: (1) identify the main problem and the specific policy domain, (2) examine the scope of the problem and what specific questions it raises, (3) determine the frameworks and analytical tools needed to develop a structured method to analyze the problem, (4) gather data to examine why the problem persists, (5) synthesize the evidence to inform policymaking and policy processes, with the goal of attaining policy change, and (6) package evidence to engage stakeholder and policymakers. This, in turn, may lead to renewed problem identification and repetition of the process for improved policymaking.



Step 1: Identify the main problem and the specific policy domain

In the context of food systems, the main policy domains include food and nutrition, land and water, and climate and ecology. Considering the complexity of policy-making and development interventions, any analysis

requires identifying relevant policy domains and determining the specific problem(s) of interest in that domain. For example, a policy problem can examine the concerns of increasing consumer access to affordable ultra-processed foods and the health-related implications in a country. This macro-level, national analysis topic is within the food and nutrition policy domain (Figure 3 and 4).

Step 2: Examine the underlying specific questions for the problem

Relevant problem-specific questions and related stakeholders are identified after establishing the policy domain and scope. In the case of the ultra-processed food environments policy domain, examples of the specific question include: (1) Why is finding solutions to combat the increasing access to affordable ultra-processed foods so controversial and what strategies are necessary for policy change? (2) Are taxes or regulations a better policy approach for reducing the overconsumption of ultra-processed foods? (3) Is the policy environment enabling or hindering access to affordable ultra-processed foods? To answer these questions, a critical assessment using PEPA can reveal conflicts, power dynamics, coalitions, beliefs, and policy processes necessary for development interventions to catalyze desired changes in the food and nutrition policy domain (see Mockshell & Ritter, 2023).

Step 3: Determining frameworks and analytical tools

The conceptual framework provides the basic elements for examining specific questions, while the analytical tool is a mechanism or instrument for examining the questions and elements of the conceptual framework. Based on the key questions of interest, this step identifies the frameworks and analytical tools relevant to answering the questions of interest identified in Step 2. For example, researchers, development practitioners, and policymakers are interested in identifying coalitions and policy views in the ultra-processed food environment. As already highlighted in Figure 3, this area of interest takes shape within the food and nutrition policy domain at the national level of analysis. Thus, policy frameworks require macro-level analysis and a related analytical tool. The Advocacy Coalition Framework (ACF) with the discourse analysis approach matches the topic of examining coalitions and policy views in the ultra-processed food environment at the macro-level (Figure 4 and Table 2). Next, if the interests are in examining the power dynamics, informal power, and power interactions in the ultra-processed food environment, then the Power Cube Framework (PCF) can be combined with a Process Net-Map for analysis. In the case of examining question-related taxes or regulations as the preferred policy approach for reducing the overconsumption of ultra-processed foods, the Kaleidoscope Framework for Policy Change approach provides a basis for analysis. This approach develops a set of indicators for identifying the drivers of policy change, the conditions under which policies emerge, and the effectiveness of policy implementation (Figure 4 and Table 2).

Step 4: Gathering data to examine why the problem persists

Relevant data is the foundation for answering and examining the policy problem and specific questions of interest. This step focuses on gathering data to answer the questions of interest. The ultra-processed food environment case study considered several frameworks, such as the ACF. These frameworks should consider stakeholder landscapes, networks, discourse, beliefs, ideas, narratives, and influence levels. These considerations provide the basis for determining the analytical methods, such as quantitative, qualitative, or mixed methods. They also help determine data types and sources, such as primary, secondary, or mixed data from different providers. The data-gathering step also informs the selection of survey tools, such as process and network mapping, semi-structured interviews, key informant interviews, and others. Determining narratives of ultra-processed food environments will require conducting in-depth interviews with stakeholders involved in this policy domain. In the case of examining the policy-enabling environment for ultra-processed foods, the

indicators from the Kaleidoscope Framework for Policy Change can provide information for developing survey tools (e.g., using multiple choice or Likert scale responses) to elicit information from participants on the key indicators.

Step 5: Synthesizing evidence to inform policy design and policy change

This step structures the raw data to generate relevant insights for stakeholders. The ultra-processed foods case study has two central and underlying questions. Why are finding solutions to combat the increasing access to affordable ultra-processed foods so controversial? What strategies are necessary for policy change? The insights will cover areas such as: (1) the stakeholder landscape in the ultra-processed food environment, (2) potential coalitions in favor of ultra-processed foods, those in a neutral position on the topic, and stakeholders opposed to ultra-processed food, and (3) contested discourses and divergent ideas on potential policy solutions. Policy analysts should seek additional insights on the influential actors, type of influence, opposition to change, and entry points for influencing policy. The insights should provide a way to understand the drivers and conditions for policy change and to move toward policy implementation. The potential risks, winners, and losers of the policy change can also be uncovered. Without identifying and addressing the interests and ideas of the actors during the policy development cycle, policy reforms may be limited in scope or fail to reach their intended impact. Such risks need to be incorporated into a recommendation for policy change coupled with evidence on how to overcome potential policy risks.

Step 6: Packaging evidence for policymakers and policy engagements

This last step involves synthesizing the relevant insights into formats for communication, dialogue, and engagement with key stakeholders and decision-makers to contribute to policy change. The evidence package may include reports, policy briefs, opinion articles, presentations, peer-reviewed articles, info-graphics, and other mediums. This final step is critical. The informal and formal communication mediums should be adapted to policymakers according to their policy domains and context.

6

Outlook of PEPA for food, land, and water systems transformation

The PEPA Sourcebook provides a step-by-step approach for conducting political economy and policy analysis across food, land, and water systems. This sourcebook contributes to PEPA by (1) identifying and organizing a collection of frameworks, analytical tools, and case studies using a systematic literature review approach (Annex A and B, Tables 1-6, and case study boxes), (2) mapping frameworks and tools to food and nutrition, land and water, climate and ecology domains, (Figures 3-6), and (3) disaggregating frameworks and tools by the level of analysis (macro -, meso -, micro -, and multi-levels) (Figures 3-6). These contributions fill an existing knowledge gap and make this PEPA Sourcebook unique for agri-food systems analysis. The PEPA Sourcebook by no means covers all frameworks, tools, and case studies, but it does provide a timely starting point, relevant to development practitioners, the donor community, researchers, and policymakers working in agri-food systems.

Politics are a crucial component of agri-food system policymaking and strategy formulation. Research and development interventions must be aligned with societal and political objectives to succeed, minimize conflicts, and maximize potential trade-offs across multiple sectors. Political economy approaches to agricultural development can be traced back to the first green revolution in the 1960s and 1970s (Birner & Resnick, 2010; de Schutter, 2019; McMichael, 2021). As Béné (2022) emphasizes in his call for food system transformation, changes in the agri-food industry require a thorough understanding of the contexts of local and international politics, economics, power dynamics, and stakeholder views. Coherent policies must be tailored to meet national and cultural needs. To gain this understanding, policymakers and development practitioners need innovative and workable tools and frameworks that can identify optimal ways to address agri-food system challenges. Evidence in the literature, however, reveals that there are limited explanatory frameworks that can adequately diagnose the challenges associated with agri-food systems (de Schutter, 2019). Frameworks and analytical tools from the political science, management, public policy, and political economy fields remain highly fragmented. Consequently, critiques proliferate regarding the lack of external validity, inability to replicate studies, lack of consistent indicators and vague measurements (Resnick et al., 2018; Fanzo et al., 2021). The PEPA Sourcebook provides frameworks and tools to enable practitioners and researchers to analyze multiple sectors of the agri-food system.

The PEPA approach centers on power relations, thus requiring consideration of politics and economics.

The political economy approach to agri-food systems takes a step beyond classical economic approaches by placing power, ideas, coalitions, and politics at the center of policy analysis (de Schutter, 2019). In general, most power resides with politicians and private sector actors, who often provide accountability and balance in the political influence discourse. Positive change across food, land, climate, and water systems requires a clear understanding of politics and economics and the dynamics between them.

PEPA is useful for analyzing progress toward and barriers to achieving the SDGs. PEPA tools and frameworks can be used to study progress and narratives towards the SDGs related to agri-food systems, specifically the goals related to zero hunger (SDG 2), climate action (SDG 13), water (SDG 14), and land (SDG 15). This sourcebook

also aligns with the new roadmap for impact outlined by the CGIAR's five impact areas: (1) nutrition, health, and food security; (2) poverty reduction, livelihoods, and jobs; (3) environmental health and biodiversity; (4) gender equity, youth, and social inclusion; and (5) climate adaptation and mitigation (CGIAR n.d.).

PEPA can be valuable in analyzing gendered power dynamics, yet more work remains in incorporating gender analysis into PEPA tools. The gender dimension of agri-food systems can be key to understanding the drivers and outcomes of policy changes in PEPA contexts. The dynamics of power relations in food, water, and land systems affect women, youth, and men differently. Park & Julia (2014) argue that men's and women's equal access to land and participation in agricultural groups, organizations, and cooperatives is crucial for ensuring food security. Evidence from the literature indicates that PEPA lacks consideration of gender issues, particularly in the policy domains related to food, nutrition, and the environment. However, PEPA's focus on power relations means that it can be useful as a tool for analyzing gender and power, both at the policy level and in formal and informal institutions (Haines & O'Neil, 2018). For example, the PEPA of Malawi's mining sector revealed the lack of policies enhancing and supporting the role of women in mining. The government's broader mining policies ignored gender (Browne, 2014). Further work is needed to more fully include gender and youth considerations in PEPA. Such work should consider the interaction between gender and policy processes from the national to household decision–making levels.

Several tools in the PEPA Sourcebook can be used for gender analysis, including Influence and Power Mapping and Kingdon's Window of Opportunity and Legal Assessment Tool. Gender mapping tools, stakeholder analysis frameworks, and the frameworks and tools outlined in this Sourcebook can be used in gender analysis. For example, multi-level stakeholder influence mapping and power mapping can help map the influence of women or women's associations on the agri-food system. At the same time, Kingdon's window of opportunity could be useful in achieving a gender-supportive policy change related to gender equity and interests. Gender mapping can also help illuminate various value chain structures, providing analyses of gender relations and roles across the value chain. Me-Nsope & Larkins (2016) mentioned that these tools allow for a clear classification of gender issues along the value chain, especially those issues related to gender inequalities in agriculture. A classification of inequalities can facilitate the development of innovative solutions to gender-based issues. PEPA tools can assist practitioners in understanding human behavior and decision-making, which is useful in exploring the gender dimension of various topics. For example, these tools can reveal how land is managed in terms of relationships or dynamics around women's decision-making power. In the context of gender-equitable land tenure policies, the legal assessment tool can help visualize the legal intricacies surrounding land access, identify gender inequalities, and target areas that require legal reforms.

PEPA can also assist in evaluating the risks associated with policy reforms in various domains. Power struggles between the central government and various interest groups can limit the impact of policy reforms on food, land, and water systems. PEPA can highlight power dynamics, influential actors, and the winners and losers of policy reforms. The insights gained can be used to improve policy design and planning. Discursive power is useful for framing problems, providing solutions, lobbying policymakers, securing research evidence, and developing alternatives (McNeill, 2019).

The PEPA Sourcebook contributes to the study of sustainable agri-food systems by providing a framework for integrating relevant national policies and strategies. The Sourcebook provides new insights for researchers, practitioners, and government agencies engaged in collaborative efforts to transform dominant foodscapes. Through a holistic agri-food systems approach, PEPA considers subsector elements, activities, and outcomes. There is a need for national policies and strategies to be oriented toward practical and clearly defined regulations and guidelines for governing the agri-food sector.

PEPA approaches to trade-offs between the system domains discussed in this sourcebook – food and nutrition, land and water, and climate and ecology – are limited and need to be explored further. Further PEPA research can provide development practitioners, the donor community, and policy analysts with an accurate understanding of political will at the start of a project. These insights enable them to focus on areas where change is possible and to schedule interventions at appropriate times in the program development cycle. This often-ignored context-specific knowledge is necessary for understanding the drivers of change, or lack of change, as well as risks to development programs. The goal is for development practitioners and researchers to apply the frameworks to answer political economy and policy-related questions.

7. Bibliography

- Ahmed, A., Kuusaana, E. D., & Gasparatos, A. (2018). The role of chiefs in large-scale land acquisitions for jatropha production in Ghana: insights from agrarian political economy. Land Use Policy, 75, 570–582. https://doi.org/https://doi.org/10.1016/j.landusepol.2018.04.033
- Akram-Lodhi, A. H. (2012). Contextualising land grabbing: Contemporary land deals, the global subsistence crisis and the world food system. Canadian Journal of Development Studies, 33(2), 119–142. https://doi.org/10.1080/02255189.2012.690726
- Amaranto, A., Juizo, D., & Castelletti, A. (2022). Disentangling sources of future uncertainties for water management in sub-Saharan river basins. Hydrology and Earth System Sciences, 26(2), 245–263. https://doi.org/10.5194/hess-26-245-2022
- Amaza, P., Mailumo, S., & Silong, A. (2021). The Political Economy of the Maize Value Chain in Nigeria (No. 60). APRA Working Paper.
- Amblard, L. (2021). Collective action as a tool for agri-environmental policy implementation. The case of diffuse pollution control in European rural areas. Journal of Environmental Management, 280, 111845. https://doi.org/10.1016/j.jenvman.2020.111845
- Anderson, M., & Leach, M. (2019). Transforming food systems: The potential of engaged political economy. IDS Bulletin, 50(2), 131–146. https://doi.org/10.19088/1968-2019.123
- Baede, A. P. M., Ahlonsou, E., Ding, Y., & Schimel, D. (2001). The climate system: An overview. In TAR Climate Change 2001: The Scientific Basis.
- Bamoi, A. G. A., & Yilmaz, H. (2021). A Multi-Perspective Analysis of Agricultural Policies in West Africa: Policy Strategies for Rethinking Sustainable Agricultural Development. Journal of Global Innovations in Agricultural Sciences, 9(3), 115–125. https://doi.org/10.22194/JGIAS/9.949
- Béland, D. (2016). Kingdon reconsidered: Ideas, interests and institutions in comparative policy analysis. Journal of Comparative Policy Analysis: Research and Practice, 18(3), 228–242
- Béné, C. (2022). Why the Great Food Transformation may not happen A deep-dive into our food systems' political economy, controversies, and politics of evidence. World Development, 154, 105881. https://doi.org/10.1016/j.worlddev.2022.105881
- Birner, R., & Resnick, D. (2010). The Political Economy of Policies for Smallholder Agriculture. World Development, 38(10), 1442–1452. https://doi.org/10.1016/j.worlddev.2010.06.001
- Bourguignon F. and Pereira da Silva L.A. (2003). The impact of economic policies on poverty an income distribution: Evaluation techniques and tools. A co-publication of the World Bank and Oxford University Press
- Browne, E. (2014). Gender in Political Economy Analysis (GSDRC Helpdesk Research Report No. 1071). Applied Knowledge Services. Birmingham, UK. Retrieved from www.gsdrc.org
- Buur, L., Nystrand, M. J., & Pedersen, R. H. (2017). The Political Economy of Land and Natural Resource Investments in Africa: An Analytical Framework (DIIS Working Paper No. 2). Copenhagen, Denmark.