

## **SUPPLEMENTAL MATERIAL Asserting public health interest in acting on commercial determinants of health in Sub-Saharan Africa: APPENDIX ON THE METHODS**

### **OVERALL**

Discourse analysis uses the language presented in a corpus or body of data to draw meaning. It is a form of qualitative research used to assess how language is used to express differing viewpoints on issues that affect society in problem-oriented social research[15]. Discourse analysis provides useful information on framings and language which are used to develop and maintain power and power imbalances and on how communication is used to achieve social goals. A discourse analysis was thus chosen as the methodology for this work to identify relevant documentation and organise evidence reflecting the perspectives of different groups of actors; about how the commercial determinants of health (CDOH) are being framed / understood and articulated; in the CDOH domains prioritised and forms of action being articulated, using an inductive content analysis on the key features, and in particular those that could generate tensions or synergies between commercial and public health objectives. The research strategy involved identifying key actor groups and relevant sources of information and evidence; extracting and analysing specific data from the documentation and validating it through a stakeholder review process. The Appendix provides detail on the methods used.

### **ACTORS**

The actors were selected on the basis of their significant and distinct roles and influence in health and development discourse and action affecting policy and practice on CDOH in SSA.

- International/ global organisations: including United Nations agencies, multilateral and bilateral finance agencies, foundations and philanthropists and South-South organisations operating in SSA
- Continental and regional organisations – Covering regional intergovernmental bodies in SSA covering health, economy and trade, diplomacy and broader intergovernmental communities, including African Union (AU) and bodies for subregions (Economic Community of West African States (ECOWAS), East African Community (EAC), Southern Africa Development Community (SADC))
- SSA governments: including relevant Ministries, statal and decision-making bodies
- Banks, investors, funders: national, regional and global finance institutions operating / investing in SSA
- Corporate, private for profit institutions and business associations operating in SSA

- Civil society/social organisations/trade union/social movements: including those involved in non-profit services, advocacy, monitoring, and social and policy engagement
- Academia: African and global actors researching and publishing on SSA

## SEARCH STRATEGY

A strategy was designed for each category of actor, specifying the scope of data to be collected, the sources to check and using common search terms relevant for CDOH, Africa and specific search terms for the different categories of actors, with source materials and inclusion criteria outlined below and in *Table A1*.

**Table A1 Document search strategy by actor, with sources included and search terms)**

Actor	Data sources included	Search terms
International/global organisations	Public domain online papers, documents and institutional websites for organisations that have embedded or extensive focus on / relevance to SSA and CDOH, and from SSA on these international actors. Documents were assessed for relevance.	[ACTOR using type OR specific name 1 OR specific name] AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social
Continental and regional organisations	Public domain online papers, documents, institutional websites, statements and resolutions, strategic plans and media reports. Documents were assessed for relevance.	[ACTOR using type OR specific name 1 OR specific name] AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social
SSA governments	Public domain online legal, statements and resolutions, media reports, strategic plans, government websites (noting lens from finance, health, trade, industry, social or other sectors). Searches implemented for SSA and then for a sample of 10 countries to cover different SSA sub-regions, language groups, economic levels and size: <ul style="list-style-type: none"> <li>• Southern Africa: South Africa, Mozambique, Zambia</li> <li>• East Africa: Kenya, Tanzania, Uganda</li> <li>• West Africa: Ghana, Nigeria, Sierra Leone</li> <li>• Central Africa: DRC</li> </ul> Documents were assessed for relevance.	<i>Searches 1:</i> Government OR state OR public sector AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social <i>Searches 2:</i> Government OR state OR public sector AND [NAME OF SAMPLED COUNTRY] AND commercial OR private OR corporat* AND health OR wellbeing OR social <i>Searches 3:</i> Government website documents from the 10 sampled countries
Banks, Investors, funders	Public domain online documents, statements and resolutions, strategic plans, institutional websites, and media reports. Searches of known institutions (eg ADB) and as identified from initial open searches. Documents were assessed for relevance.	[ACTOR using type OR specific name 1 OR specific name] AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social
Corporate, private for-profit and business associations	Public domain online documents, statements and resolutions, strategic plans, media reports and institutional websites. Further searches of specific corporates identified from initial general searches. Documents were assessed for relevance.	[ACTOR using type OR specific name 1 OR specific name] AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social

Actor	Data sources included	Search terms
Civil society/ social	Public domain online papers, media articles documents, statements and resolutions, strategic plans and institutional websites for domestic and international civil society (noting type) operating in SSA. Documents were assessed for relevance.	[ACTOR type listed in Col 1 AND Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social
Academia	Public domain online papers, documents, journal papers	Africa AND commercial OR private OR corporat* OR invest* AND health OR wellbeing OR social

The next subsection of this Appendix describes the data extraction. Searches were implemented in October 2021 by RL, SG and PCK, subdividing the actors, with review and discussion of gaps in interim search results and how to address them by all. The searches were made in online libraries, databases and institutional websites of journal papers, reports, briefs, blogs and other media post 2010 in English. The sources for all groups covered open search engines – Google, Scielo; journal libraries – PubMed, Medline, African Journals online, Google Scholar; and institutional websites. The searches included English language documents. Where a paper was written in French or Portuguese but had an English abstract / summary with pertinent information, this document and the English summary information was included. Searches were implemented separately for each category of actor, covering papers by or about these actors. A few small variations in search terms were tried as relevant to the actor when needed to check coverage or to respond to gaps in search results. The reference lists in sourced papers were also scanned for further relevant papers to be included. Inclusion of new papers was not actively sourced where a saturation of specific key information on framings, policies, priorities, actors, features, issues, ideas was obtained, as triangulated from multiple (4-5) different sources. A total of 300 documents were included as a result of this process shown in the full analysis[14], of which 90 are cited in this paper, noting that this figure excludes the 4 citations in the main text on methods, including of this Appendix.

#### DATA EXTRACTION AND THEMATIC CODING OF DISCOURSE

The information/evidence was extracted from the sources noted above by RL, SG and PCK for their allocated actor, using a separate table for each actor in one row per document. The categories/ broad coded areas for information were identified from the aims of the discourse analysis, viz to capture (i) the terms, conceptual, analytic framing and types of commercial factors affecting public health, the drivers and nature of positive/negative impacts on health; (ii) the priorities in and forms of action on CDOH articulated in the discourse, and (iii) the level of the framing, analysis or priority identified in the discourse (See *Table A2*). Full quotations were pasted into the table using italics (with source page number). Comments on data, issues raised and notes were included as footnotes.

**Table A2: Data extraction table categories**

<b>GENERAL CATEGORY OF ACTOR</b>				
<b>Source, data quality</b>	<b>CDOH discursive, conceptual, analytic framing</b>	<b>CDOH key domains/ priorities</b>	<b>Form of action and actors</b>	<b>Level and scope</b>
Cite and url,  Noted limitations of the evidence	The terms used to refer to CDOH, how it is framed / understood and articulated generally. Where included, note was made of key features in the discourse identified to generate tensions or synergies between commercial and public health objectives (eg: ideas/values/norms; harmful /health promoting commodities, resources, capabilities, practices, power relations, economic drivers. Inclusion of graphics that show ideas expressed visually with source url and page number.	Specific CDOH areas / domains given focus in the discourse, whether general, sectoral, linked to specific commodities, business processes. Where included note was made of the reasons/ impacts/ multi-country data motivating the priority.	Forms of action noted in the discourse, whether proposed, planned or implemented to address CDOH, the scale (local/ national/ regional/ international); tools and actors identified as key for the actions, and issues affecting the choice and implementation.	Whether framing/ domains and actions primarily at local, national (country); regional (region); global/ multilateral international /bilateral

The data extracted for each relevant actor was included in the data extraction table for the relevant actor. Where information was relevant to more than one actor, it was pasted into each relevant actor table. The data tables were reviewed by RL and SG to note gaps in completeness, clarity and quality with follow up using a second round of data extraction by the team. The data capture and review added a further check on the voice being expressed in each document, and enabled final assignment of a document to the relevant actor category for the analysis (See *Table 1* in the paper for search and final assignments).

As an exploration of discourse, the evidence was obtained from diverse sources of evidence, both peer reviewed and non-peer reviewed. As one indication of data quality, journal papers, books and a number of agency reports included are internally or externally peer-reviewed, but some documents, websites, formal media and other sources would not have been through a formal peer review process, although they do apply their own fact checking, editorial procedures that assist to ensure validity and data quality. We limited to formal media to avoid ad hoc, unchecked information from social media. *Table A3* shows the distribution of source by actor. It suggests that limiting to peer reviewed papers would bias towards the academic voice, while online institutional reports and websites are a more significant source for other actors covered. The table thus indicates that a discourse analysis needs to include wider sources of evidence to avoid biasing the findings. The more limited use of media sources and their distribution across actors means that these sources had relatively limited impact on data quality.

**Table A3 Sources of evidence by actor**

<i>Actor</i>	<i>Journal papers, books, theses</i>	<i>Online reports, strategy, policy documents</i>	<i>Media items</i>	<i>Total</i>
International / global	2	44	5	51
SSA continental / regional	2	50	2	54
SSA Govts	2	12		14
Investors and funders in SSA	1	23	5	29
Corporates, business agencies in SSA	2	18	1	21
Civil society in SSA	1	39	2	42
Academia in and on SSA	74	12	3	89
<b>TOTAL #</b>	<b>84</b>	<b>198</b>	<b>18</b>	<b>300</b>
<b>TOTAL % of total #</b>	<b>28%</b>	<b>66%</b>	<b>6%</b>	<b>100%</b>

### DATA ANALYSIS

Discourse analysis uses qualitative data analysed through content analysis, narrative analysis, or thematic analysis to identify themes and patterns. The data extraction organised the evidence within the codes/themes identified from the focus of the work. A manual thematic analysis was implemented by RL and SG and reviewed by all (RL, SG and PCK) to identify the thematic language/patterns of language that were frequently repeated in the data in the data extraction tables. No coding software was used. The data was analysed within each actor group to manually extract the themes. Repeated patterns were obtained by triangulating themes raised across multiple entries within the category of actor. While this was the primary focus of the analysis, outliers were also noted. This thematic analysis was carried out in several rounds until data saturation was achieved, ie no new themes or information were found. In a second stage, RL carried out a manual thematic analysis across the actors to identify themes and sub-themes emerging across actors, the similarities and differences between them and the implications of the thematic findings for tensions and synergies between stated commercial and public health objectives. The analysis was reviewed by SG and PCK before finalisation. The themes were developed inductively, drawing from the evidence found.

### STAKEHOLDER REVIEW AND VALIDATION

Noting the limitations in documentation and in countries covered, a stakeholder review and validation process was designed to review and provide insights on the findings of the analysis. Given resource limitations and COVID-19 restrictions, and the time constraints of key actors, this was implemented through purposively identified semi-structured discussions, to reflect on specific issues from and implications raised in the discourse analysis, including findings on contrasting views.

Nine key informants (KI) were purposively identified, including from lusophone and francophone countries, from national, sub-regional, continental and international levels; from state, non-state and technical actors, from different regions and to address specific areas raised in the discourse analysis. The issues for discussion were prepared for each KI by RL and SG and reviewed by the full team after the data analysis, to focus on areas that needed further verification or review feedback, given the findings of the analysis. *Table 1* in the text shows the distribution and level of KIs by actor. *Table A4* provides anonymised information on the specific stakeholders included and the broad issues covered, with specific findings from the discourse analysis used to focus the review discussion. As a validation and review process for specific issues raised in the discourse analysis, these discussions were not subject to an IRB review, but their purpose and intended use was clearly presented in writing and verbally in advance by RL or SG; as well as the anonymised nature of the views/information provided, any queries were addressed and consent obtained prior to the discussions. The review discussions were carried out by RL and SG. They took 30-45 minutes at a mutually agreed time in November-early December 2021 on zoom, or by written feedback from the stakeholder. No payments were provided for the stakeholder review. The input from the discussion with the KIs was integrated into the analysis and report.

**Table A4: KI actors and areas for the review discussion**

	<b>Actor</b>	<b>Area of review discussion arising from the discourse analysis</b>
1	Africa sub-regional intergovernmental agency lead	<ul style="list-style-type: none"> <li>• The role of regional agencies in supporting / enabling states to address food and other CDOH.</li> <li>• The capacities/measures needed for and positive experiences in states taking regulatory, tax or other actions to address harmful commercial products or processes.</li> </ul>
2	Sub-regional public health actor	<ul style="list-style-type: none"> <li>• The role of regional bodies and national states in aligning commercial private for profit actors involved with R&amp;D, medicines, technology and services to national policies and population health needs, including in relation to equity.</li> </ul>
3	Sub-regional trade union lead	<ul style="list-style-type: none"> <li>• The role and experiences of successful strategies by trade unions in addressing the externalizing of health costs/ burdens by production systems.</li> <li>• The effectiveness of /deficits to address in state-civil society relationships in promoting public interests around health in corporate practices in the region.</li> <li>• The lessons from trade union engagement with corporates for wider civil society on moving narratives, power, resources towards public and social interests.</li> </ul>
4	Continental finance actor	<ul style="list-style-type: none"> <li>• Successful measures that can be applied in SSA and in countries to steer international business in SSA away from harmful product and process and how far they are different to those used for domestic business</li> </ul>
5	International technical expert with experience in SSA	<ul style="list-style-type: none"> <li>• Learning in SSA from global pandemic processes for global agency engagement in SSA on CDOH.</li> </ul>
6	Continental ecology technical agency	<ul style="list-style-type: none"> <li>• Determinants of international corporate influence over state regulation, policy and practice in relation to harms to health in food systems and biodiversity affecting health, and of effective state responses.</li> <li>• Priorities in global platforms, standards, and negotiations for SSA public health interests in these areas.</li> </ul>

	<b>Actor</b>	<b>Area of review discussion arising from the discourse analysis</b>
7	National expert in health technology innovation	<ul style="list-style-type: none"> <li>• Priorities for R&amp;D/ innovation/ proof of concept work to promote public health or integrate health in key commercial / production activities in SSA.</li> <li>• Areas of divergence between transnational and domestic investors and businesses on R&amp;D, technology development for health.</li> <li>• Measures to strengthen SSA based R&amp;D/ innovation and its uptake by investors, producers, states and public within the region and internationally.</li> </ul>
8	National government health actor	<ul style="list-style-type: none"> <li>• Areas of shared and divergent concern and policy response between health and finance ministries in relation to commercial practices affecting health.</li> <li>• Measures and successful experiences in bringing greater policy and financing coherence between different sectors and actors to promote or protect health in commercial practices.</li> </ul>
9	Regional tax/finance actor	<ul style="list-style-type: none"> <li>• Priority and feasible financial/tax/budget measures to control harmful CDOH in health services and technology production.</li> <li>• Learning from successful strategies and areas for improvement in state accountability on and corporate compliance with tax revenues for public health.</li> <li>• Regional and global measures/support.co-ordination for tax measures on CDOH.</li> </ul>

Citations in this Appendix refer to the Reference list in the main paper.