

Methodology used for ActionAid report “How the Finance Flows”

EMBARGOED until 4th September 2023

Sector and company selection

In order to focus on the agricultural sectors and value chains that have the greatest social and environmental impacts in the Global South, ten market segments were chosen: agrochemicals, seeds, animal feed & nutrition, animal pharma, meat production, palm oil, rubber, soybeans, sugar cane and commodity traders. The 45 top companies active in these markets were identified.

The selection of fossil fuel companies, and the underlying data, draws on the recent Throwing Fuel on the Fire report, produced by Reclaim Finance.¹ This includes 368 coal companies, 91 upstream oil and gas companies, and 77 midstream companies (e.g. developing oil and gas pipelines and LNG terminals). This resulted in 493 fossil fuel companies (at group level) to be examined, of which 354 received financing that falls within the geographical scope and time period of our research.

Types of finance

In this report, we have focused on the core banking activities of providing credit to companies through providing loans, and underwriting share and bond issuances. The scope of this research for credit activities was from January 2016 to September 2022.

Geographical scope

This report tracks financing for fossil fuels and industrial agriculture in the “Global South”, which we have defined as comprising the 134 countries that make up the Group of 77 and China coalition at the United Nations.²

As many of the companies tracked in this report operate globally, geographic adjusters were applied to estimate the percentage of a company’s operations in the Global South. In the case of oil and gas companies, these were calculated using data on reserves. In the case of industrial agriculture, no geographic adjusters were calculated for the companies engaged primarily in the upstream production of agricultural products (meat production, palm oil, rubber, soybeans, sugar cane) since the company selections included mostly companies based in the Global South. However, geographic adjusters were calculated for companies

¹ Reclaim Finance (2023) Throwing Fuel on the Fire: GFANZ financing of fossil fuel expansion, <https://reclaimfinance.org/site/en/2023/01/17/throwing-fuel-on-the-fire-gfanz-members-provide-billions-in-finance-for-fossil-fuel-expansion/>

² Finance Center for South-South Cooperation (2015) “Global south countries (Group of 77 and China)”, http://www.fc-ssc.org/en/partnership_program/south_south_countries

engaged in the following sectors: Agrochemicals; Animal pharma; Seeds; Commodity traders. As these companies are all engaged in agriculture production inputs or trade, the estimated geographic adjuster was based on the proportion of the global value of agricultural production in 2021 generated by the Global South based on FAOStat data. This was estimated to be 71%.

Sectors

A number of industrial agriculture companies are active in multiple sectors. To control for this, “segment adjusters” were calculated by Profundo so that the estimated financial flows to these companies only apply to the industrial agriculture share of their business.

In the case of industrial agriculture, segment adjusters were calculated for companies engaged in the following sectors: Animal pharma; Agrochemicals; Rubber; Seeds. To the fullest extent possible, these segment adjusters use the segment reporting in annual reports, complemented by further information from company publications and websites and estimations where necessary. No segment adjusters were applied to companies engaged primarily in the upstream production of agricultural products (meat production, palm oil, soybeans, sugar cane) or to agricultural commodity traders.

No segment adjusters were applied to the fossil fuel companies as these are primarily engaged in the fossil fuels.

Data sources, estimates and analysis

The underlying data on which this report is based was received from financial databases Bloomberg, Refinitiv, IJGlobal and TradeFinanceAnalytics. It was then analysed by ActionAid and Profundo. Where several banks jointly issue credit (syndicated loans) or act together to provide underwriting services, estimates have been made regarding each individual bank’s commitments.

Industrial agriculture companies selected

Market segment	Selection criteria	Selected companies	Source
Agrochemicals	Agrochemical sales 2021	ChemChina (CN) Bayer (DE) BASF (DE) Corteva Agriscience (US) UPL (IN) Yara (NO)	ii

Seeds	Seeds and traits sales 2020	Bayer (DE) Corteva Agriscience (US) ChemChina (CN) BASF (DE) Groupe Limagrain (FR)	[ii]
Animal feed & nutrition	Annual feed production volume	CP Group (TH) New Hope Group (CN) Haid Group (CN) Cargill (US) Muyuan Foodstuff (CN)	[iii]
Animal pharma	Animal pharma sales 2021	Zoetis (US) Merck Animal Health (US) Boehringer Ingelheim Animal Health (DE)	[iv]
Meat production	Total sales of beef / pork / poultry	JBS (BR) Cargill (US) WH Group (CN) Marfrig (BR) Muyuan Foodstuff (CN)	[v]
Palm oil	Oil palm planted area	Golden Agri Resources (Sinar Mas Group) (SG) Kuala Lumpur Kepong (Batu Kawan Group) (MY) Astra Agro Lestari (Jardine Matheson Group) (ID) Indofood Agri Resources (Salim Group) (SG)	[vi]
Rubber	Rubber planted area	Wilmar International (SG) Vietnam Rubber Group (VRG) (VN) Halcyon Agri / Sinochem (CN) Société Financière des Caoutchoucs (SOCFIN) (LU)	[vii]

Soybeans	Soy & other crops planted area	Bakrie Group (ID)	[viii]
		Salim Group (ID)	
		Siat Group (BE)	
		SIFCA (CI)	
		Sampoerna Agro (ID)	
		SLC Agrícola (BR)	
		Grupo Bom Futuro (BR)	
		Grupo Bom Jesus (BR)	
		Grupo Amaggi (BR)	
		Grupo Los Grobo (AR)	
Sugarcane	Sugar production 2020/21	Copersucar (BR)	[ix]
		Raizen (BR)	
		Wilmar International (SG)	
		Olam International (SG)	
Commodity traders	Total sales 2020/21	Cargill (US)	[x]
		COFCO International (COFCO Corp) (CN)	
		ADM (US)	
		Wilmar International (SG)	
		Bunge (US)	
		LDC (NL)	
		Olam International(SG)	

Please note, parts of underlying data for the report can be shared upon request.

- ⁱⁱⁱ AgNews (2022, October 10), "Top 20 global agrochemical companies in 2021 ranked", online: <https://news.agropages.com/News/NewsDetail--44255.htm>, viewed in April 2023; Hoinkes, C. (2022, October 18), "Corporations: Big profits with toxic trade", Heinrich Boell Stiftung, online: <https://eu.boell.org/en/PesticideAtlas-corporations>, viewed in April 2023; UPL (2022), *Statement of Audited Consolidated Financial Results*, p. 15.; Yara (2022) 2021 Integrated Report, online <https://www.yara.com/corporate-releases/yara-publishes-2021-integrated-report/>, viewed in April 2023

- ^{lii} Mordor Intelligence (2023), "Global seed market - Size, share, COVID-19 impact & forecasts up to 2028", online: <https://www.researchandmarkets.com/reports/5717189/global-seed-market-size-share-covid-19>, viewed in April 2023;
ETC Group (2022, September), *Food Barons 2022*, p. 16;
Digital Journal (2022, April 27), "Hybrid Seeds Market Top Leading BASF SE, Bayer AG, Syngenta Group, KWS SAAT SE, Land O' Lakes with Strategies and Forecast 2030", online: <https://www.digitaljournal.com/pr/hybrid-seeds-market-top-leading-basf-se-bayer-ag-syngenta-group-kws-saat-se-land-o-lakes-with-strategies-and-forecast-2030-basf-se-bayer-ag-syngenta-group-kws-saat-se-land-o>, viewed in April 2023;
S&P Global (2021, November 3), "Global vegetable seeds market is increasingly fragmented and diversified", online: <https://www.spglobal.com/commodityinsights/en/ci/research-analysis/global-vegetable-seeds-market.html#:~:text=Global%20vegetable%20seeds%20market%20is%20increasingly%20fragmented%20and%20diversified,-Bharti%20Malhotra&text=Vegetable%20seeds%20form%20the%20third,global%20seed%20sales%20during%202020>, viewed in April 2023.
- ^{liii} *Feed Strategy* (2022, September 8), "Top Feed Companies: 144 global producers rank in 2022"; CP Foods (n.d.), "CPF business overview", online: <https://www.cpfworldwide.com/en/business>, viewed in April 2023;
Poultry International (2022, October), "World's top 50 broiler producers", p. 8;
Poultry International (2022, October), "World's top 30 egg producers", p. 12;
Pig Progress (2021, June 18), "Who are the world's mega pork producers?";
Haid Group (n.d.), "Industrial distribution", online: <https://www.haid.com.cn/en/Feed/index.aspx>, viewed in April 2023;
Food Engineering (2022), "2022 top food & beverage companies", online: <https://www.foodprocessing.com/top100/2022#:~:text=The%20three%20largest%20food%20and%20beverage%20companies%20in%20North%20America>, viewed in April 2023;
Muyuan Foodstuff (2022), *Annual Report 2021*, p. 2.
- ^{liiii} *Animal Health India* (2022, May 18), "Global top 20 animal health companies in 2021", online: <https://animalhealthindia.com/global-top-20-animal-health-companies-in-2021/>, viewed in April 2023;
Businesswire (2022, March 22), "Worldwide animal health industry to 2025 - Researchandmarkets.com", online: <https://www.businesswire.com/news/home/20220322005763/en/Worldwide-Animal-Health-Industry-to-2025---Featuring-Merck-Co-Boehringer-Ingelheim-Zoetis-and-Elanco-Among-Others---ResearchAndMarkets.com>, viewed in April 2023.
- ^{liiii} JBS (2022), *Annual Sustainability Report 2021*, p. 18;
Feed Strategy (2022, September 8), "Top Feed Companies: 144 global producers rank in 2022";
Poultry International (2022, October), "World's top 50 broiler producers", p. 8;
Food Engineering (2022), "2022 top food & beverage companies", online: <https://www.foodprocessing.com/top100/2022#:~:text=The%20three%20largest%20food%20and%20beverage%20companies%20in%20North%20America>, viewed in April 2023;
WH Group (n.d.), "Corporate profile", online: <http://www.wh-group.com/html/about.php>, viewed in April 2023;
Pig Progress (2021, June 18), "Who are the world's mega pork producers?";
Marfrig (2022, March 8), *Earnings Release 4Q21*;
Marfrig (n.d.), "Our operations", online: <https://www.marfrig.com.br/en/our-operations>, viewed in April 2023;
Muyuan Foodstuff (2022), *Annual Report 2021*, p. 2.
- ^{liiii} Golden Agri (n.d.), "Who we are", online: <https://www.goldenagri.com.sg/about-us/#:~:text=Who%20we%20are,the%20heart%20of%20our%20operations>, viewed in April 2023;
KLK (n.d.), "Plantations", online: <https://www.klk.com.my/plantations/>, viewed in April 2023;
Astra Agro Lestari (n.d.), "PT Astra Agro Lestari Tbk brief profile", online: <https://www.astra-agro.co.id/en/pt-astra-agro-lestari-tbk-brief-profile-2/>, viewed in April 2023;
Indofood Agri Resources (2019, December), "Geographical presence", online: <http://www.indofoodagri.com/misc/geographic-presence-ar2021.pdf>, viewed in April 2023;
Wilmar International (n.d.), "Oil palm plantation & milling", online: <https://www.wilmar-international.com/our-businesses/plantation/oil-palm-plantation-milling>, viewed in April 2023.
- ^{liiii} Vietnam Rubber Group (2022, April), *Annual Report 2021*, p. 11;
Halcyon Agri (2022, April), *Annual Report 2021*, p. 5;
Société Financière des Caoutchoucs (SOCFIN) (2022, April), *2021 Annual Report*, p. 16-17;

Bakrie Sumatera Plantations (2022, June), *Annual Report 2021*, p. 67;
Indofood Agri Resource (2022, April), *Annual Report 2021*, p. 15;
Siat Group (n.d.), "About", online: <https://www.siat-group.com/about/>, viewed in March 2023;
SIFCA (2022, August), *Annual Report 2021*, p. 8;
Sampoerna Agro (2022, May), *Annual Report 2021*, p. 85.

^[viii] *CanalRural* (2021, May 30), "Quem é o 'Rei dos hectares' no Brasil? Conheça nossos 3 maiores produtores agrícolas", online: <https://www.canalrural.com.br/noticias/agricultura/quem-e-o-rei-dos-hectares-no-brasil-conheca-nossos-3-maiores-produtores-agricolas/>, viewed in April 2023;
Grupo Bom Jesus (n.d.), "Produtos", online: <https://bomjesus.com/produtos/>, viewed in April 2023;
RondoniaOvivo (2022, November 30), "31 mil hectares: Grupo Amaggi negocia terras no Cone Sul de RO por R\$ 1,6 bilhão";
iProfesional (2022, October 10), "El mayor grupo agropecuario del país pone en marcha un nuevo plan de expansión", online: <https://www.iprofesional.com/negocios/370525-el-mayor-grupo-agropecuario-del-pais-lanza-plan-de-expansion>, viewed in April 2023.

^[ix] Copersucar (2022), "Copersucar en números", online: <https://www.copersucar.com.br/copersucar/numeros-acucar-etanol/>, viewed in April 2023;
YahooFinance (2022, September 14), "Brazil's Raízen says direct sugar sales rise to 50% after end of joint venture";
Wilmar International (2021), *Annual Report*, p. 15.

^[x] Cargill (2022), *Annual Report*, p. 5;
COFCO International (n.d.), "Who we are", online: <https://www.cofcointernational.com/who-we-are>, viewed in April 2023;
COFCO Corp (n.d.), "About COFCO", online: <http://www.cofco.com/en/AboutCOFCO/>, viewed in April 2023;
ADM (2022), *Annual Report 2021*, p. 44;
Wilmar (2022), *Annual Report 2021*;
Bunge (2022), *Annual Report 2021*, pp. F-4, F-67;
LDC (2022, March 24), *Louis Dreyfus Company Reports Strong 2021 Financial Results*;
Olam International (2022), *Annual Report 2021*, p. 5.

^[xi] Reclaim Finance (2023) Throwing Fuel on the Fire: GFANZ financing of fossil fuel expansion, <https://reclaimfinance.org/site/en/2023/01/17/throwing-fuel-on-the-fire-gfanz-members-provide-billions-in-finance-for-fossil-fuel-expansion/>