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ARTICLE

The paper famine: Newsprint, development, and the materialities of Third World media in the time of decolonisation

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Abstract

This article explores the global political economy of paper—particularly newsprint—during the era of decolonisation. It shows how Third World countries, the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), and the Food and Agricultural Organisation (FAO) understood newsprint as an infrastructural tool for accelerating development. However, a 'paper famine' in the mid-1970s exposed the major structural inequalities in the global newsprint trade, catalysing experiments to develop local paper manufacturing capacity in the Third World. The article demonstrates how debates about access to newsprint were tightly bound up with arguments about global information flows and the role of the press in the developing world. In so doing, the article argues that bringing global histories of commodities and communications into conversation enriches our understanding of the media by drawing attention to the material substance by which information circulates.

Keywords: newsprint; paper; development; media; UNESCO; FAO

In December 1973, Singapore's *New Nation* drew attention to a notice issued by a local charity which raised funds through collecting used newspapers. It reported a spate of incidents whereby fraudsters had claimed to be representatives of the charity to obtain old newspapers from households. The charity cautioned residents to only hand over their newspapers to volunteers with name badges or wearing the organisation's yellow t-shirts. This was not the only unusual story about scrap newspapers in Singapore at the time. Schoolboys were rummaging through rubbish heaps for paper to sell to rag-and-bone men, who in turn sold it to market traders.[1] Fishmongers who used the paper for wrapping their produce complained that whereas they had been previously paying 10 to 12 cents per *kati* (just over 600 grams) of newspapers, now they were charged up to 30 cents.[2]

The curious case of Singapore's new economy in old newspapers was among the more eye-catching local consequences of a global phenomenon. In 1973, the world was confronted with a paper crisis. In the space of two years, the average world export price of newsprint almost doubled. However, while larger American and European newspapers rode out the crisis by cutting a few pages or dropping a supplement, many of their counterparts in the Third World faced an existential threat. The *Nigerian Observer* warned about the danger to Africa's newspapers: 'From

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[1]'Beware the Old-Paper Thieves', *New Nation*, 5 December 1973, 2.
[2]'Boom for "Rag and Bone" Men', *New Nation*, 1 November 1973, 2.

the east to the west of the continent and from the north to the south, the dreadful spectre of early demise stares directly at the face of virtually every newspaper and magazine.'[3] In what was dubbed a 'paper famine', newspaper owners struggled to meet spiralling bills from paper manufacturers—if they could obtain any supplies at all. 'The hunger for newsprint in Asia is severe', warned the Press Foundation of Asia. 'But what is happening right now is a slide from hunger to near-complete starvation.'[4]

The 'paper famine' reflected international inequalities in the manufacture and trade of newsprint, while also catalysing efforts to reduce them. This article explores how a network of actors—politicians, editors, publishers, economists, industrialists, intellectuals, and technocrats—conceptualised and addressed the challenge of putting paper in the hands of reading publics in the Third World. It foregrounds the role played by United Nations agencies, especially the United Nations Educational, Scientific, and Cultural Organisation (UNESCO), and the Food and Agricultural Organisation (FAO), in coordinating these initiatives. Through this history, it explains how arguments about newsprint were tightly bound up in touchstone issues in global affairs during the late twentieth century, such as development, modernisation, and democracy.

Taking newsprint as a subject brings into the same analytical space several broad and recurrent themes in global history. First, it contributes to the history of commodities, which, despite its key role in the wider field, has neglected the matter of paper.[5] Yet paper is, as Heidi Tworek notes, a 'curious commodity', which is mass-produced from natural resources using industrial processes, but which itself 'creates the material conditions for the dissemination of information'.[6] Building on this premise, this article asks historians of commodities and the global economy to consider how the world trade in mass-produced goods essential for the functioning of the media—which includes not just paper but goods such as ink, presses, radio receivers, or television sets—shaped the nature of print cultures and public spheres. Conversely, it asks historians so accustomed to using the output of the media as a source to think more critically about the global structural forces which created and foreclosed the material possibilities for disseminating information. Whether they were major international titles or publications with small, local circulations, all newspapers were ultimately dependent on globalised commodity chains that often perpetuated patterns of economic imperialism.[7] Further, though an aspect less explored here, foregrounding the materiality of the media presses us to understand how the circulation of information is dependent on the colonisation and exploitation of land through the forestry sector. Indeed, to grasp the import of what they call an 'essential infrastructure of modernity', Aleksandra Kaminska and Rafico Ruiz helpfully propose the concept of 'xylomedia', a term which connects forests, mills, exporters, importers, publishers, and readers.[8]

As a point of departure, though, let us begin with the history of newspapers in the Third World. Historians have established the role played by newspapers in the longue-durée process of

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[3]Quoted in *West Africa*, 20 May 1974, 614.

[4]Chowdhury to Narasimhan, 8 August 1973, UN Secretariat Archives, Kurt Waldheim Papers, S-0972-0012-06-0001, accessed via archives.un.org.

[5]For state-of-the-field essays, see Kate Smith, 'Amidst Things: New Histories of Commodities, Capital, and Consumption', *Historical Journal* 61, no. 3 (2018): 841–61; Joshua Specht, 'Commodity History and the Nature of Global Connection: Recent Developments', *Journal of Global History* 14, no. 1 (2019): 145–50.

[6]Heidi Tworek, '"The Death of News?" The Problem of Paper in the Weimar Republic', *Central European History* 50, no. 3 (2017): 329.

[7]On materiality and the media, see the discussion in Richard R. John, 'Debating New Media: Rewriting Communications History', *Technology and Culture* 64, no. 2 (2023): 326–31. On capitalism and communications, see Heidi J. S. Tworek and Simone M. Müller, 'Editorial – Communicating Global Capitalism', *Journal of Global History* 10, no. 2 (2015): 203–11.

[8]Aleksandra Kaminska and Rafico Ruiz, 'Mediating the News: Infrastructures of Pulp and Paper Modernity in *The Bowater Papers*', *Canadian Journal of Communication* 46, no. 2 (2021): 319. The history of paper as a product of environmental exploitation and its shifting 'commodity frontiers' is beyond the scope of this article, but offers a rich field for further research. See Sven Beckert *et al.*, 'Commodity Frontiers and the Transformation of the Global Countryside: A Research Agenda', *Journal of Global History* 16, no. 3 (2021): 435–50.

decolonisation across a diverse landscape of 'print cultures'.[9] Even where critical of his specific argument about the creation of nationalisms, this work reliably draws on Benedict Anderson's *Imagined Communities*,[10] with its focus on the role of print in convening publics and disseminating ideas. Yet these histories rarely think beyond the text itself, to consider the processes by which words were brought into print. Indeed, for an argument about the impact of 'print capitalism', Anderson himself has strikingly little to say about actual economies of print. As James Cane emphasises in his history of the press in Argentina, 'the discursive and textual practices of twentieth-century journalism can become socially meaningful only in relation to the productive infrastructure and distributive capacity of media institutions'—including newsprint.[11]

In comparison to other technologies which drove modern communications revolutions, paper seems a mundane topic of inquiry. Printed newspapers are after all, as Michael Stamm puts it, 'dead tree media'.[12] Only recently have historians, so accustomed to writing *with* and *about* newspapers, begun to turn their attention to the subject of the paper upon which they were printed. Historians of interwar Europe have explained how the politics of paper scarcities shaped new media landscapes, challenging unstable democracies and bolstering authoritarian states.[13] Yet if debates among governments, industrialists, and media houses about newsprint largely took place within domestic frameworks, the commodity chains which connected tree to printed page were fundamentally global. For example, Stamm has shown how Canadian and American political and business interests used their control of international newsprint supplies for geopolitical influence during the Second World War and early Cold War.[14]

From the perspective of the Third World, access to newsprint supplies had little to do with the ideological struggles of the Cold War. This article begins by showing how the question of paper in Africa, Asia, and Latin America was bound up in debates about development, especially regarding education and literacy levels. Meanwhile, the supply of newsprint, often brought under the control of the state, became a bone of contention for newspaper proprietors, who accused governments of muzzling dissent by denying access to paper. The article then explains how the long-term structural problem of unequal access to newsprint was brought to the fore by the 'paper famine' of the early 1970s. It argues that in response, Third World states unsuccessfully demanded a fairer deal on paper, in step with broader attempts to restructure the global economic and communications landscape. The final section explains how, in acknowledgement that they could only secure a reliable newsprint supply through developing domestic capacity, industrialists and technocrats experimented with smaller mills or using locally available fibres to create new types of pulp, with mixed results.

To understand this history, this article builds upon another growing strand of global history which examines the role played by international organisations in processes of decolonisation and development in the twentieth century. This literature emphasises the work of predominantly Western experts and technocrats in constructing a new postwar global order and building new states after empire.[15] In the field of communications history, Diana Lemberg and Sam Lebovic

[9]Derek R. Peterson, Emma Hunter, and Stephanie Newell, eds., *African Print Cultures: Newspapers and their Publics in the Twentieth Century* (University of Michigan Press, 2016); Emma Hunter and Leslie James, 'Introduction: Colonial Public Spheres and the Worlds of Print', *Itinerario* 44, no. 2 (2021): 227–42.

[10]Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (Verso, 1983).

[11]James Cane, *The Fourth Enemy: Journalism and Power in the Making of Peronist Argentina, 1930–1955* (Pennsylvania State University Press, 2012), 9.

[12]Michael Stamm, *Dead Tree Media: Manufacturing the Newspaper in Twentieth-Century North America* (Johns Hopkins University Press, 2018).

[13]Tworek, 'The Death of News?'; Nelson Ribeiro, 'Censorship and Scarcity: Controlling New and Old Media in Portugal, 1936–45', *Media History* 21, no. 1 (2015): 74–88.

[14]Michael Stamm, 'The International Materiality of Domestic Information: The Geopolitics of Newsprint during World War II and the Cold War', *International History Review* 44, no. 6 (2022): 1286–305.

[15]See, for example, Amy L. S. Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945–1965* (Kent State University Press, 2006); Marc Frey, Sönke Kunkel,

have argued that early UNESCO policy was dominated by the United States' prioritisation of the 'free flow' of information, to further its interconnected geopolitical, economic, and cultural interests.[16] But, as Sarah Nelson explains, focusing on Western actors ignores challenges to this agenda from the decolonising world, who reckoned with imperial legacies and widening global inequalities.[17] This article explores these debates through the work of the FAO and UNESCO, whose interests spanned the chain of activities which linked forest industries, international trade, and the print media itself. It demonstrates that while these organisations provided a coherent forum in which to diagnose the 'paper problem' and develop potential solutions to it, ultimately they lacked the ability to meaningfully challenge imbalanced patterns of global production, trade, and consumption.

The article draws upon a range of sources which themselves were originally printed on paper. But this research was only made possible by their digitisation, which allowed me to trace the evolution of the newsprint question across a wide timespan via keyword searches, especially 'newsprint'. Trawling through papers issue-by-issue, page-by-page, for a topic that rarely made the headlines, was unviable. However, gravitating towards digitised newspapers led me to larger titles, primarily in Britain, India, and the United States, at the expense of smaller titles or those which ceased printing and shut down, in some cases due to newsprint shortages.[18] Furthermore, the story of newsprint told through the pages of newspapers themselves obviously is only the public-facing expression of this politics. To excavate the behind-the-scenes discussions in boardrooms would require greater access to the archives of media houses themselves. Instead, the article turns to international debates about paper, through the part-digitised online archives of UNESCO[19] and the records of the Forestry Division of the FAO, which though digitised can only be consulted at the organisation's headquarters in Rome. A final body of material here is drawn from trade magazines, which contained news about industrial developments alongside commentaries on the state of the paper trade.

Development's paper problem

Soon after its creation in 1945, UNESCO set about assessing the state of communications in the postwar world. The Second World War had hit global newsprint supply chains hard. Even as the industry recovered in Europe, paper rationing remained in place across much of the continent.[20] Given the persistence of paper shortages in Europe, the availability of newsprint earned particular

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and Corinna R. Unger, eds., *International Organizations and Development, 1945–1990* (Palgrave Macmillan, 2014); Eva-Maria Muschik, *Building States: The United Nations, Development, and Decolonization, 1945–65* (Columbia University Press, 2022); Eva-Maria Muschik, 'Special Issue Introduction: Towards a Global History of International Organizations and Decolonization', *Journal of Global History* 17, no. 2 (2022): 173–90; Sandrine Kott, *A World More Equal: An Internationalist Perspective on the Cold War* (Columbia University Press, 2024).

[16]Diana Lemberg, *Barriers Down: How American Power and Free-Flow Policies Shaped Global Media* (Columbia University Press, 2019); Sam Lebovic, *A Righteous Smokescreen: Postwar America and the Politics of Cultural Globalization* (University of Chicago Press, 2022).

[17]Sarah Nelson, 'A Dream Deferred: UNESCO, American Expertise, and the Eclipse of Radical News Development in the Early Satellite Age', *Radical History Review*, no. 141 (2021): 30–59.

[18]On the problems of digitised newspapers, see Lara Putnam, 'The Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast', *American Historical Review* 121, no. 6 (2016): 377–402; Heidi J. S. Tworek, 'Digitized Newspapers and the Hidden Transformation of History', *American Historical Review* 129, no. 1 (2024), 143–47. While research was conducted across a broader range of titles, this article cites material from the *Guardian*, *New York Times*, *Times of India* (via ProQuest Historical Newspapers), *Daily Nation* (via the Global Press Archive, https://gpa.eastview.com/crl/ean/), and *New Nation* (via NewspaperSG, https://eresources.nlb.gov.sg/newspapers), which were accessed through paywall-restricted online databases. All other newspapers were accessed either in hard copy or microfilm.

[19]Accessed via UNESDOC, https://unesdoc.unesco.org/archives.

[20]Jan Wieten, 'The Press the Papers Wanted? The Case of Post-War Newsprint Rationing in the Netherlands and Britain', *European Journal of Communication* 3, no. 4 (1988): 432–55; Adrian Hadland, 'The World Paper Famine and the South African Press, 1938–1955', *South African Journal of Economic History* 20, no. 1 (2005): 40–64.

attention from UNESCO, especially as influential American communications experts believed that access to newspapers could bolster the liberal order against the threat of communism.[21] In 1949, UNESCO commissioned the Economist Intelligence Unit to produce a report on the problem of paper. 'Paper for printing books, magazines and newspapers is a material essential to the development of education, science and culture and to the effective enjoyment of freedom of information both within and between countries', stated UNESCO's foreword. 'Shortages in supply and unequal distribution of paper impede the progress of that human welfare and understanding between peoples which are essential to peace.'[22]

UNESCO's interest in paper soon shifted from an emphasis on postwar reconstruction to the problem of development in what became known as the Third World. Although the number of independent states in Africa and Asia remained small, their representatives argued for a more even distribution of newsprint. At the UN Conference on Freedom of Information in Geneva in 1948, delegates from India and the Philippines called for the establishment of a global pool of newsprint, overseen by an international board.[23] As the paper shortage continued, in 1951 the UN Economic and Social Council resolved that it constituted 'a crisis which threatens education, culture and freedom of information in a number of countries, and which hampers and is thus likely to render ineffectual the efforts undertaken by the United Nations, the specialised agencies and many governments to over come illiteracy and develop international understanding'.[24] The following year, the Economic and Social Council declared itself satisfied that the *short-term* situation had improved to the degree that immediate international action was no longer necessary.[25] Instead, as more decolonised states joined the UN, its agencies turned increasingly to the question of newsprint and development.

UNESCO's engagement with newsprint was part of a broader initiative that identified strengthening national communications systems as an engine of socioeconomic modernisation.[26] A UNESCO report in 1957 found that around 60% of the world's population lacked newspapers, radio receivers, or televisions. It held that this limited access to information represented an obstacle to development. A synthesis of the proceedings of UNESCO regional conferences of communications experts concluded that it was 'apparent that as the economy of an underdeveloped country expands, one may expect a commensurate increase in expansion of the mass media. Indeed, the two processes interact because development of the media in turn spurs economic growth.'[27] Access to paper, including newsprint, became bundled into the concept of 'communications for development', which drew its inspiration from American modernisation theory. As Wilbur Schramm, the communications specialist most associated with the idea, put it in a report commissioned by UNESCO, 'the task of mass media of information and the "new media" of education is to speed and ease the long, slow social transformation required for economic development'. Schramm identified the availability of newsprint as a fundamental material condition for the growth of the mass media. He observed that, even with conservative estimates of demographic and economic growth in Africa and Asia, the projected demand for newsprint in 1975 would be around six times higher than 1955.[28]

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[21]Lemberg, *Barriers Down*, 52–63; Stamm, 'International Materiality', 12–14.

[22]Economist Intelligence Unit, *The Problem of Newsprint and Other Printing Paper* (UNESCO, 1949).

[23]Lebovic, *Righteous Smokescreen*, 132.

[24]Quoted in Stamm, 'International Materiality', 1299.

[25]Salvador P. López, 'Freedom of Information', report submitted to the UN Economic and Social Council, 6 May 1953, 44–6, UN Digital Library, E/2426, accessed via digitallibrary.un.org.

[26]Jonas Brendebach, 'Towards a New International Communication Order? UNESCO, Development, and "National Communication Policies" in the 1960s and 1970s', in Jonas Brendebach, Martin Herzer, and Heidi J. S. Tworek, eds., *International Organizations and the Media in the Nineteenth and Twentieth Centuries: Exorbitant Expectations* (Routledge, 2018), 158–81.

[27]UNESCO, *Mass Media in the Developing Countries* (UNESCO, 1961), 17.

[28]Wilbur Schramm, *Mass Media and National Development: The Role of Information in Developing Countries* (Stanford University Press/UNESCO, 1964), 27, 106–9.

The tropes of hunger and famine pervaded these UNESCO initiatives from the outset. As Elizabeth le Roux argues, this language invoked the idea of a crisis, which demanded intervention, since it was 'linked to the discourses of progress and development'.[29] A UNESCO radio feature from 1952 presented newsprint in terms of essential everyday consumption. 'A measure of Unesco's success is the great new reading hunger that is sweeping these continents [Africa, Asia, and Latin America]', it stated. 'Their thirst for knowledge is seen in rising newsprint consumption.'[30] UNESCO's *Courier* magazine employed the same language. 'Today, a new kind of hunger is spreading across the globe. For have not books, magazines, newspapers and every category of printed publication been called the chief nourishment for the human mind?', it asked. 'The new hunger is robbing millions of men of their mental nourishment. Only planned world action can halt it.'[31]

UNESCO's concern with access to paper pushed it towards closer cooperation with the Forestry Division of the FAO.[32] In 1952, the UN's Economic and Social Council instructed the FAO to undertake a programme of action to stimulate the production of pulp and paper, which involved surveying potential expansion of output and then providing advice on the planning, construction, and operation of mills. In 1959, the FAO created an advisory group on pulp and paper, which comprised representatives of national industrial bodies—i.e., the voices of big business. Though its membership included the 'have nots' as well as the 'haves', the former meant industrialists from developing countries with an established paper sector, such as India and the Philippines, rather than states which manufactured no pulp and paper at all.[33] While the advisory committee initially concentrated on the developed world, it recognised the challenges faced by Third World states in obtaining and manufacturing paper. Consistent with the logic of the 'communications for development' paradigm, an FAO report submitted to a regional UNESCO meeting in Bangkok in 1960 asserted that there was 'a direct relationship between newsprint and printing and writing paper consumption, on the one hand, and economic, social, educational and cultural activity, on the other'. This had 'special significance' in 'less developed countries', since 'efforts to accelerate advancement would be impossible without increased paper availability and consumption'.[34] In short, technocrats at the FAO and UNESCO concurred that paper-based reading materials were essential for teaching literacy and then reaping its cultural and socioeconomic benefits.[35]

The problem lay in how to acquire these commodities. The production of pulp and paper was almost entirely located in the Northern Hemisphere, home to abundant softwood coniferous forests. By contrast, the timber found in tropical regions was mostly tougher and more resinous hardwoods, which are resistant to pulping. The biodiversity of tropical forests was also a challenge, as they can contain thousands of different species of tree. The result was that in 1962, Canada accounted for 40.6% of global newsprint production, followed by the United States (12.9%), Finland (6.5%), and Japan (6.3%). As the United States consumed almost all its own newsprint, Canada accounted for 73% of global exports.[36] Conversely, just twelve out of fifty-six African

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[29]Elizabeth le Roux, 'The Myth of the "Book Famine" in African Publishing', *Review of African Political Economy* 48, no. 168 (2021): 262.

[30]'Start the Presses: A UNESCO Feature on the World Newsprint Crisis' (1952), UNESDOC, MCR/243, WS/032.93.

[31]'The Printed Word and the World Paper Crisis', *UNESCO Courier*, January 1952.

[32]In contrast to the extensive literature on UNESCO, historians have largely overlooked the FAO. See Corinne A. Pernet and Amalia Ribi Forclaz, 'Revisiting the Food and Agriculture Organization (FAO): International Histories of Agriculture, Nutrition, and Development', *International History Review* 41, no. 2 (2019): 345–50.

[33]'Advisory Board on Pulp and Paper', 31 October 1959, FAO Archives, 17/FO/FO18-8, vols 1–4.

[34]FAO, 'The Problem of Newsprint and Printing Paper in the Far East' (1959), UNESDOC, MC/DEV/7/ADD.9, WS/119.130.

[35]Alongside newspapers, books were vital to these development projects: Céline Giton, 'Weapons of Mass Distribution: UNESCO and the Impact of the Book', in *A History of UNESCO: Global Actions and Impacts*, ed. Poul Duedahl (Palgrave Macmillan, 2016), 49–72; Sarah Brouillette, *UNESCO and the Fate of the Literary* (Stanford University Press, 2019).

[36]Data from FAOSTAT, accessed via https://www.fao.org/faostat.

states produced paper of any description. South of the Sahara, only apartheid South Africa manufactured newsprint.[37] The geography of paper production, like the manufacture of other industrial commodities, was shaped by deeper patterns of imperialism, which concentrated production in Europe and North America. But the critical difference here was that the raw materials themselves were located in temperate regions, limiting the potential of import substitution strategies. The consequent need to import newsprint was a major drain of foreign exchange reserves in the decolonising world. This issue was exacerbated by the structure of the global newsprint market. Newspapers with high circulations and substantial capital could sign long-term contracts at favourable rates with major suppliers. Smaller newspapers—essentially all newspapers in the Third World—could not enter into such agreements and therefore paid ad hoc 'spot prices', which a UNESCO conference on the media in Africa found in 1962 could be as much as three times greater than mill prices.[38]

One solution considered by the international organisations was the redistribution of existing supplies through using paper as development aid. In 1962, the FAO commissioned a study entitled 'Paper and Progress' from Gunnar Myrdal's Institute for International Economic Studies in Stockholm, with support from UNESCO. The report proposed 'to accelerate education and economic development through the distribution of paper as bilateral or multi-lateral grants'.[39] It advised that the surplus production of paper in North America and Europe, which was expected to take place in the 1960s, should be deployed as development aid.[40] But even the FAO recognised that this was a sticking plaster rather than a permanent solution. It had already concluded that less developed countries needed to establish their own industries. 'Not only is such a development, provided it is based on sound economic principles, clearly desirable; it is mandatory if these regions are to be assured of adequate supplies.'[41]

How, though, were states to produce this paper, without suitable timber resources? In 1949, UNESCO considered the potential for manufacturing paper from a range of alternative fibres found across the colonial and developing world, including straw, esparto grass, and bagasse (the cellulose-rich waste product from the processing of sugarcane). Because of both technical difficulties and the high cost of production, the report was pessimistic.[42] Other industrial stakeholders were more optimistic, as Michael Stamm has shown. In Latin America, the United States saw bagasse newsprint as a means of guaranteeing a free press in support of its Cold War interests. Enthusiasm for bagasse experiments also came from the Third World itself, including India.[43] Yet progress remained slow: an Egyptian official who asked the FAO for advice on bagasse newsprint in 1963 was informed that the paper produced was either economically unviable or poor quality.[44] Undeterred by such setbacks, an FAO-UNESCO conference on pulp and paper in Africa and the Near East, held in Cairo in 1965, set up a working group on producing newsprint from bagasse.[45] However, public declarations of breakthroughs proved false dawns. Too often, bagasse produced only 'newsprint-type' papers which did not meet international standards.[46] As we will see, these verdicts would be revisited in the aftermath of the 'famine'.

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[37]'Development of the Press in Africa', paper submitted to UNESCO Meeting on Experts on Development of Information Media in Africa, November 1961, UNESDOC, MC/DEVAF/4.ADD.1, WS/1161.52.

[38]Ibid.

[39]Glesinger to Pischnich, 22 October 1962, FAO Archives, 17/FO/FO18-4, vol. 1.

[40]'The Place of Paper in Development and Foreign Aid' [1963], FAO Archives, 17/FO/FO18-10, vol. 1.

[41]FAO, World Demand for Paper to 1975: A Study of Regional Trends (FAO, 1960), 54.

[42]Economist Intelligence Unit, The Problem of Newsprint and Other Printing Paper (UNESCO, 1949), 98.

[43]Stamm, 'International Materiality', 1300–1.

[44]Sunderlin to Kamel, 29 January 1963, FAO Archives, 17/FO/FO18-8, vols 5–6.

[45]UN/FAO, Proceedings of the Conference on Pulp and Paper Development in Africa and the Near East, Cairo, 8–18 March 1965, vol. I (FAO, 1966), 19.

[46]'The Bagasse Controversy Continues', Pulp & Paper International, June 1972, 80.

For the time being, the Third World therefore had to build mills that would manufacture paper from imported pulp. However, conventional thought doubted the economic wisdom of such ventures. Mills were deemed to be extremely sensitive to economies of scale. The domestic markets of the Third World remained relatively small. FAO and UNESCO meetings routinely emphasised the need for mills to serve regional, rather than national, markets. But as visions of regional integration in the Third World faded amid the consolidation of national sovereignty after independence, these possibilities fell away. In 1972, an FAO report on paper production in the Arab world held that it was 'practically impossible to justify the establishment of newsprint mills in developing countries'.[47] Furthermore, the international climate for investment was inclement. Amid a wave of nationalisations in the decolonising world, the industrialists of the FAO's advisory committee warned that 'political instability and the resulting insecurity of investment' represented the principal barrier to foreign investment into mills in the Third World.[48] As the UN's 'Decade of Development' came to an end, the global disparities in newsprint consumption remained staggering. In 1969, the average American consumed 44 kilograms of newsprint and the average Japanese 17 kilograms. The same figure was 2.7 kilograms in Brazil, 360 grams in India, and just 12 grams in Ethiopia—an indicator of the extreme disparities among developing nations, as well as between North and South.[49]

Multiple parties expressed their grievances with this status quo. A meeting of the newsprint committee of the Asian Newspapers Conference in Manila in 1967 called for international assistance to prevent 'severe newsprint shortage by 1970', envisaging—somewhat prophetically— a worse situation to follow.[50] In calling for cheap and reliable sources of newsprint, newspaper proprietors often came into conflict with the economic and, at least in the proprietors' view, political interests of the state, which exercised tight control over newsprint supply, either through the monopolies created by nationalised trading parastatals or the granting of import licences. In India, these arrangements became the source of a heated public debate. In 1962, the government took complete control of the newsprint trade. It allocated supplies to newspapers in accordance with annual quotas, whose announcement became a recurrent cause of complaint. Larger newspapers alleged that the government used the system to circumscribe the power of media houses. These tensions came to a head in 1972, when foreign exchange difficulties caused by the war with Pakistan led the government to limit all newspapers to ten pages. Major titles challenged the measures at the Supreme Court. The lawyer representing the *Hindu* argued that this was 'a newspaper control policy in the guise of foreign exchange regulation'. He went further, to connect the policy with the infringement of fundamental freedoms. 'Take away newsprint [and] you cannot have freedom of speech', he argued.[51] The Supreme Court agreed. 'In the garb of distribution of newsprint, the government has tended to control the growth and circulation of newspapers', stated the judgment, which argued that 'freedom of the press is both qualitative and quantitative ... and lies in both the circulation and in content'.[52] The Indian debate demonstrated how the simple matter of paper could become the subject of intense controversy, as editors and politicians strove to define the parameters of the political economy of print.

Less polemically, UNESCO recognised that lack of access to paper was holding back its literacy campaigns in the developing world. In 1972, it organised an International Book Year. Amid these

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[47]K. R. Meyer, 'Cultural Papers in the Arab Countries – The Possibilities of Increased Local Production', paper submitted to UNESCO Meeting of Experts on Book Development in the Arab Countries, Cairo, 1–6 May 1972, UNESDOC, COM.72/CONF.9/4.

[48]Final Report of Seventh Session of FAO Advisory Committee on Pulp and Paper, Rome, 24–25 October 1966, FAO Archives, 17/FO/FO18-8, vols 9–11.

[49]FAO, *Guide for Planning Pulp and Paper Industries* (FAO, 1973), Appendix 1.

[50]'World Aid Sought for Newsprint', *Times of India*, 10 May 1967, 9.

[51]'Govt. Counsel Justifies Rationing of Newsprint', *Times of India*, 27 July 1972, 3.

[52]'Ten-Page Ceiling Order on Newspapers is Declared Invalid', *Times of India*, 31 October 1972, 1; 'In Defence of Freedom', *Times of India*, 31 October 1972, 8.

celebratory activities, stakeholders drew attention to the paper problem. The national UNESCO commissions of several South Asian states called on the organisation to investigate solutions to shortages, including the proposal for a regional pool of paper stocks for emergencies.[53] The tropes of hunger and famine again provided a language of urgency. 'Literacy languishes unless constantly fed', argued the authors of *The Book Hunger*, an examination of the publishing sector in the Third World. 'With an ever-widening need for reading material, we find areas of abundance, areas of scarcity and areas of famine', they wrote. But rather than considering the active redistribution of paper, the report only acknowledged the technological challenges facing production from tropical timber. 'On a global scale, there is no real paper problem, since production still outdistances demand. All indications are that this situation will continue.'[54]

Within a matter of months, such certainty seemed complacent, as the world's publishing industries were convulsed by a paper shortage.

The ravages of the paper famine

The Third World's weak foothold in an international newsprint market that was driven by Western European and especially North American demand left it vulnerable to price fluctuations. During the 1960s, newsprint prices had remained largely stable. The economic boom in the West increased the demand for advertising space in the media. To meet the need of advertisers while retaining proportionate news coverage, newspapers increased their number of pages. Industrialists hurried to construct new pulp and paper mills to supply their customers. Total world production rose from 14.4 million tons in 1961 to 21.9 million tons in 1972.[55] However, the race to capture this growing market created surplus capacity and thus low newsprint prices, which satisfied the media houses but made for an unprofitable industry.[56]

Alongside these structural challenges, the industry faced the cost of adapting to new concerns about its environmental sustainability. First, the rise of environmental activism in the 1960s across North America and the Nordic countries prompted their governments to place new obligations on mills, which were notorious polluters. One study found that the cost of water pollution control rose fourfold from $0.64 per ton of newsprint in 1970 to $2.63 in 1975.[57] Paper manufacturers faced more existential concerns, too. The paper sector was literally rooted at the intersection of ecological depletion and industrial capitalism. In 1970, the Bank of Finland announced that it would not approve financial investment for new mill projects until it had confirmation of sufficient timber resources.[58] In 1973, Sweden deferred all decisions on the construction of new mills until the completion of a new study on forest resources. A Swedish industrial body warned that 'a too intensive harvesting of the mature forests during the next 10 or 20 years could lead to a severe decline later on when our forest capital will consist of a very much larger proportion of young generation trees'.[59]

These anxieties reflected a global ideological turn that called into question the shibboleths of growth which had underpinned postwar theories of development. Through a confluence of political trends—social-democratic welfare commitments, ecologically focused environmentalism, countercultural movements—economists became increasingly attuned to the destructive

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[53]'International Book Year – 1972: Report by the Director-General', 21 September 1972, UNESDOC, 17 C/75.

[54]Ronald Barker and Robert Escarpit, eds., *The Book Hunger* (UNESCO, 1973), quotations at 70, 53–4.

[55]Data from fao.org/faostat.

[56]On the background to the crisis in the West, see Pauline Wingate, 'Newsprint: From Rags to Riches – and Back Again?', in *Newspapers and Democracy: Essays on a Changing Medium*, ed. Anthony Smith (MIT Press, 1980), 63–89.

[57]John E. G. Sikes, 'A Clean Piece of Paper', *Unasylva*, no. 109 (1975).

[58]Sakari Heikkinen, *Paper for the World: The Finnish Paper Mills' Association – Finnpap, 1918–1996*, trans. Malcolm Hicks (Otava, 2000), 329.

[59]'Statement on the Situation of the Pulp and Paper Industry in Sweden', enclosed in Sjunnesson to Vakomies, 17 February 1975, FAO Archives, 17/FO/FO3-401, vol. 17.

effects of a linear path to progress premised on continual economic growth. These issues formed the intellectual backdrop to the Club of Rome's influential report on *The Limits to Growth*, which stressed that unrestrained economic growth and environmental degradation were inextricably entwined.[60] The new concept of 'sustainable growth' challenged the precepts of modernisation theory.[61] These resonated within the squeezed pulp and paper sector. 'We may be entering an era which demands a new approach to expansion', *Pulp & Paper International* mused, in a response to the Club of Rome.[62]

In these uncertain times, sharp disruptions to global pulp and paper supply chains in 1973 triggered panic. First, heavy spring rains delayed logging operations in Canada, the world's largest newsprint manufacturer. More importantly, the sector was hit by a wave of labour activity. In August, Canadian railway workers went on strike. This was followed by a lengthy dispute at the country's leading mills, which cut daily newsprint production from 25,000 to 19,000 tons.[63] Then, as the effects of these labour disputes took effect, the decision of the Organisation of the Petroleum Exporting Countries (OPEC) to increase petroleum prices forced up production costs in the energy-intensive pulp and paper sector. The immediate origins of the 'paper famine' were therefore located in the major paper-producing and -exporting states of the global North. It was also exacerbated, but crucially not caused, by the oil shock. The effect was a sharp rise in the price of newsprint. Having increased by only $41 per ton in the decade to 1973, over the following two years it increased by $130 per ton, as Figure 1 shows.

Despite consuming—or, better put, because they consumed—relatively low quantities of newsprint, Third World states were hit hardest by the crisis. When publishers in the developed world grappled with rising prices, they at least had some room for manoeuvre. Larger titles could cut back their use of paper by shaving off a few pages or dropping a weekend supplement, without too serious consequences. There was a general shift towards lighter weight newsprint. Established, relatively well-capitalised media houses signed contracts with suppliers that guaranteed paper at a set price. Some even owned shares in paper mills.[64] Most newspapers in the Third World had no such safety net. As the FAO noted, 'the demand/supply imbalance is most serious for consumers who have usually depended upon short-term purchase of paper rather than on long-term contracts'.[65] Whereas in 1973, Africa received 60,000 tons of newsprint from the Nordic countries, which provided over 80% of the continent's total requirements, its allocation for 1974 dropped to 19,600 tons.[66] The *Times of Zambia* complained that the 'most annoying thing about the threat to reduce supplies is that Africa appears to be suffering because of sheer exploitation'. European countries, on the other hand, would 'get more than they have ever done before' since they could pay a higher price and were near sources of supply.[67]

This structural imbalance was compounded by pressing demands on scarce foreign exchange reserves generated by other, higher-profile commodity shortages. An unusually strong El Niño weather event affected global grain production, creating a food crisis.[68] Next, as developing states

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[60]Donella H. Meadows *et al.*, *The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind* (Earth Island, 1972).

[61]Stephen Macekura, *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge University Press, 2015); Elke Seefried, 'Rethinking Progress: On the Origin of the Modern Sustainability Discourse, 1970–2000', *Journal of Modern European History* 13, no. 3 (2015): 377–400.

[62]'Must We Re-Define Industry Objectives?', *Pulp & Paper International*, April 1972, 108.

[63]'Canadian Newsprint Threat', *Times*, 17 August 1973, 18; 'Labour Troubles Ill-Timed for Canadian Paper Mills', *Times*, 24 September 1973, 22.

[64]The history of the 'paper famine' outside the Third World is beyond the scope of this article, but merits investigation.

[65]Boerma to various, n.d. [November 1974], FAO Archives, 17/FO/DP9-1/INT74-026, vol. 1.

[66]'Paper Famine Strikes at Africa's Newspapers', *African Development*, January 1974, 59.

[67]Quoted in BBC Summary of World Broadcasts, ME/4447/B/5, 10 November 1973.

[68]Christian Gerlach, 'Famine Responses to the World Food Crisis, 1972–5 and the World Food Conference of 1974', *European Review of History* 22, no. 6 (2015): 929–39; Dongkue Lee, 'The Solution Redefined: Agricultural Development, Human Rights, and Free Markets at the 1974 World Food Conference', *International History Review* 44, no. 6 (2022): 1369–85.
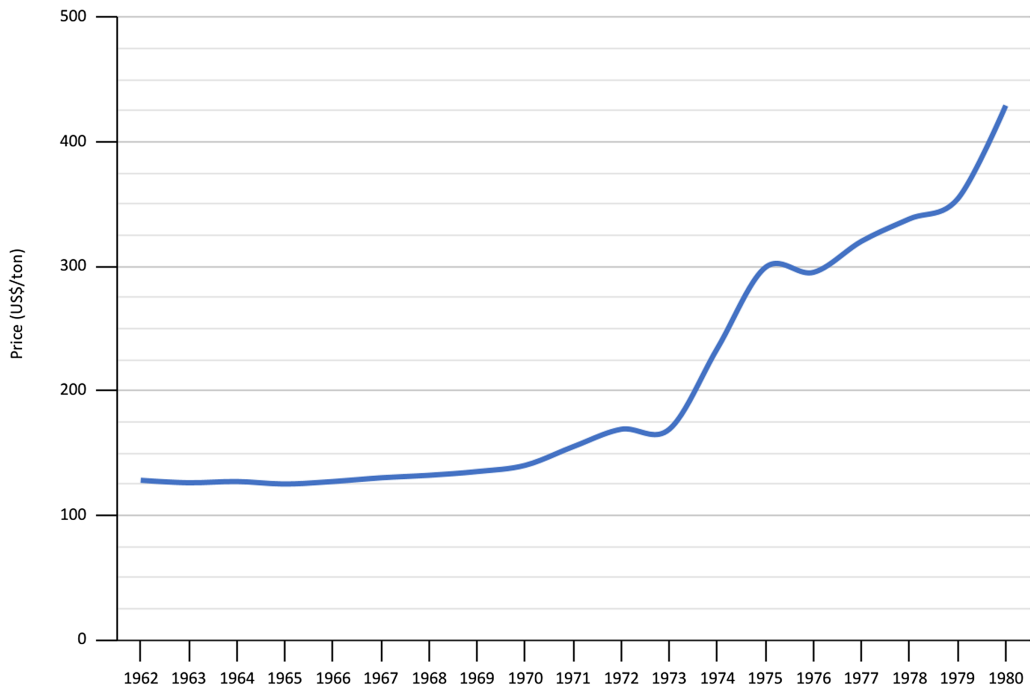
Figure 1. Average world newsprint export value, 1962–80. FAO, *Forest Products Prices, 1962–1981* (FAO, 1982), 100.

struggled to pay for food, OPEC's 'oil revolution' created a catastrophic foreign exchange burden on petroleum importing states in the Third World, which rippled through political and economic life.[69] Importing food and oil—plus other key commodities, like fertiliser—took precedence over paper. The result was a perfect storm of intersecting crises in which Third World governments struggled to justify expenditure on paper imports—if they could acquire paper at all. The FAO estimated that newsprint consumption during the crisis fell by 20% in developing countries versus 5% in developed countries.[70]

A handful of examples illustrate the impact of the 'paper famine' on Third World newspapers. Titles which already comprised little more than one or two sheets cut back: *Ngurumo*, Tanzania's only privately owned newspaper, lost two out of its six pages.[71] In Vietnam, owners agreed to limit their newspapers to a single folded sheet of four pages.[72] Some newspapers, like Ghana's *Pioneer*, went out of business altogether.[73] Singapore's *New Nation* eventually shifted from a broadsheet to a tabloid format to save on newsprint (and doubtless frustrating the fishmongers and fraudsters we met in the opening vignette of this article).[74] Cutbacks often came at the expense of column

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[69]Christopher R. W. Dietrich, *Oil Revolution: Anticolonial Elites, Sovereign Rights, and the Economic Culture of Decolonization* (Cambridge University Press, 2017); Shigeru Akita, ed., *Oil Crises of the 1970s and the Transformation of International Order: Economy, Development and Aid in Asia and Africa* (Bloomsbury, 2023); Emily Brownell, 'Reterritorializing the Future: Writing Environmental Histories of the Oil Crisis from Tanzania', *Environmental History* 27, no. 4 (2022): 747–71; Elizabeth Chatterjee, 'Late Acceleration: The Indian Emergency and the Early 1970s Energy Crisis', *American Historical Review* 129, no. 2 (2024): 429–66.

[70]FAO, *World Pulp and Paper Demand, Supple and Trade* (FAO, 1977), vol. 1, 16.

[71]*Ngurumo*, 4 October 1976, 1.

[72]Donald L. Guimary, 'The Press of South Vietnam: A Recent Perspective', *Gazette* 21, no. 3 (1975): 163–9.

[73]*West Africa*, 20 May 1974, 614.

[74]'Now it's Nine Columns', *New Nation*, 16 July 1973, 1.

inches rather than advertising, as struggling newspapers prioritised revenue streams.[75] Paper shortages had unusual repercussions. The *Voice of Uganda* paradoxically witnessed a sudden *increase* in circulation. But far from representing a larger readership, growing sales were driven by market traders who bought up copies to use in the absence of their usual supplies of wrapping paper, which was also hit by the global shortage. The practice was swiftly made a criminal offence.[76] In Tanzania, a minor scandal broke when a parastatal printing firm was found to have imported 50 tons of newsprint manufactured in Portugal. This contravened legislation which prohibited the import of any goods from Portugal or its colonies, where Tanzania supported armed liberation movements.[77]

Editors used increasingly scarce space to weigh in on a problem which threatened their livelihoods. In some instances, they accused their own governments of manipulating the situation or acting out of wilful negligence. Many Third World states tightened control over the distribution of import licences or increased tariffs on paper to conserve scarce foreign exchange. The Sri Lankan government restricted the quota of newsprint allocated to independent titles, while state-owned newspapers received their full ration. Independent newspapers turned to the black market for supplies, leading to accusations that this illicit newsprint was actually being sold by the government press.[78] The *Times of India* stopped printing its Sunday edition in Bombay and attacked the government for failing to secure newsprint supplies or develop its domestic industry despite the ample presence of raw materials. 'All this makes it hard to resist the conclusion that the government is not too unhappy at seeing the independent press in this plight', it alleged.[79] Elsewhere, criticism was less direct, but nonetheless encouraged the state to take remedial action. Kenya's *Daily Nation* drew attention to the country's 20% duty on newsprint imports. In calling for its removal, the *Nation* not only cited the importance of freedom of expression, but also observed that it would assist the government to 'mobilise public opinion and public consciousness about development issues'.[80]

By 1975, the worst of the crisis had passed. Indeed, as calm returned, experts questioned whether there had even been an actual newsprint shortage. A consensus emerged that the crisis had been primarily caused by media houses building up stocks to hedge against future price rises, which resulted in a stampede to buy up remaining supplies and tie down future contracts with manufacturers.[81] But this concern was also informed by genuine anxieties about the future of the paper sector. As the FAO summarised:

> with rapidly increasing capital costs, initiated from about the beginning of the decade, by relative capital scarcity, and more particularly by added investments for obligatory pollution control, intensified by rapidly escalating fuel costs and needs for energy savings, there was serious concern over profitability and the continuing establishment of adequate pulp and paper production capacity to meet future demand. A false scarcity attitude developed in 1973 and 1974, stock were [sic] increased excessively and prices rose rapidly.[82]

[75]A UNESCO report, incorporating research by the communications expert N. N. Pillai, found that over the course of the 1970s, Indian newspapers became more dependent on advertising to cover the rising costs of materials, resulting in an increase in advertising rates and the space allocated to adverts. Graham Murdock and Noreene Janus, *Mass Communications and the Advertising Industry* (UNESCO, 1985), 40–1.

[76]Frank Barton, *The Press of Africa: Persecution and Perseverance* (Africana, 1979), 9.

[77]'Paper from Portugal Seized', *Daily News*, 22 January 1974. I thank James Brennan for bringing this article to my attention.

[78]Valerie Kaye, 'Sri Lanka – Silencing the Press', *Index on Censorship*, March 1975, 67.

[79]'Under Stress', *Times of India*, 15 November 1973, 4.

[80]'Removing Duties on Newsprint', *Daily Nation*, 4 June 1974, 6.

[81]As Eiko Maruko Siniawer has demonstrated in the contemporaneous case of the panic-buying of toilet paper in Japan, concerns about scarcity and the collapse of confidence in economic growth gripped consumers. '"Toilet Paper Panic": Uncertainty and Insecurity in Early 1970s Japan', *American Historical Review* 126, no. 2 (2021): 530–54.

[82]FAO, *World Pulp and Paper Demand*, 7.

Nonetheless, industrial stakeholders warned against a return to the status quo. At a World Paper and Pulp Conference in Stockholm in October 1974, Sweden's minister for trade questioned whether lower prices were desirable. 'Another period of dropping prices of raw material and rising costs for industrial products would only prepare the ground for a repetition of the present situation next time there is a boom', he warned.[83] However, the conference, which was sponsored by the *Financial Times*, dealt almost exclusively with the situations in Europe and North America.[84] While Western industrialists, media proprietors, and politicians were preoccupied with their own problems, their Third World counterparts looked to international organisations to address their even more serious paper predicament.

A new paper internationalism?

The paper famine came at a moment when developing countries were using international fora like the UN and its agencies to challenge global structures of power which left them in positions of dependency, especially vis-à-vis the West. The UN Conference on Trade and Development and regional institutions, particularly the UN Commission for Latin America, provided spaces for the incubation and elaboration of radical critiques of the world's economic system.[85] These debates gestated into calls for a New International Economic Order (NIEO), which was formally promulgated at the UN General Assembly in May 1974, at the nadir of the paper crisis. The NIEO called for a restructuring of international trade and business to bolster the sovereignty of developing countries.[86] It was accompanied by initiatives to redress imbalances in global patterns of information, communications, and cultural exchange, which became central to the agenda of UNESCO. As a commodity essential to any text-based media, paper sat at the intersection of interwoven proposals to recalibrate the global economy and reform systems of communications. Drawing confidence from these developments and urgency from the 'famine', Third World politicians, industrialists, and technocrats pressed the case for more equitable access to newsprint.

To understand these dynamics requires returning to the apex of the 'famine'. In December 1973, India's minister of information and broadcasting, I. K. Gujral, wrote to René Maheu, the director-general of UNESCO, about the 'present world-wide crisis in newsprint supply'. He quoted the Press Foundation of Asia's warning that the crisis risked 'irreparable damage' to the region's press. However, Gujral's message was not simply a plea for help. His critique went much deeper. 'Is it fair that the Press in Asia should be so starved while the need of her vast millions for information and knowledge is far greater than that of the peoples of North America and Western Europe?', he asked. 'Is it not imperative therefore to strive for a more rational distribution of world newsprint production?' Given that newsprint demand in Asia was relatively low, he argued, this would not involve a 'major sacrifice' in Europe or North America. 'Just a little self-denial on their part would enable us to meet our needs from world markets.' Gujral acknowledged that India's efforts to secure its own supplies had failed. 'The only hope, therefore, lies in Unesco promoting an initiative at the international level which would persuade the advanced countries to a fairer distribution of newsprint', he pleaded.[87] A meeting of Asian newspaper experts, organised by UNESCO in Tokyo in June 1974, took up Gujral's appeal. The meeting recommended that

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[83]'Price Rise Inevitable if Supplies Are to Increase', *Financial Times*, 29 October 1974, 4.

[84]The participation of Pedro Picornell of the Paper Industries Corporation of the Philippines was an exception.

[85]Dietrich, *Oil Revolution*; Johanna Bockman, 'Socialist Globalization against Capitalist Neocolonialism: The Economic Ideas behind the New International Economic Order', *Humanity* 6, no. 1 (2015): 109–28; Margarita Fajardo, *The World That Latin America Created: The United Nations Economic Commission for Latin America in the Development Era* (Harvard University Press, 2022).

[86]Nils Gilman, 'The New International Economic Order: A Reintroduction', *Humanity* 6, no. 1 (2015): 1–16; Adom Getachew, *Worldmaking after Empire: The Rise and Fall of Self-Determination* (Princeton University Press, 2019), 142–75.

[87]Gujral to Maheu, copied in 'The Shortage of Newsprint in Asia', paper submitted to UNESCO Meeting of Experts on the Development of the Periodical Press in Asia, Tokyo, 11–17 June 1974, UNESDOC, COM.74/CONF.614/3.

UNESCO should appeal to developed states to reduce their paper consumption and make available this surplus to developing countries.[88]

At UNESCO's General Conference in Paris in late 1974, Gujral introduced a resolution urging greater cooperation between producers and consumers to tackle the current challenges and mitigate any future newsprint crises. More creatively, it called for the establishment of a 'world paper bank', which would hold or identify paper stocks to protect the 'urgent educational, cultural and communication needs, particularly in the developing nations'.[89] While these suggestions had a long history, dating back to Indian and Filipino interventions at the Conference on Freedom of Information in Geneva in 1948, the urgency demanded by the 'paper famine' and the Third World's growing strength within international organisations forced a more serious reckoning with the idea. In March 1975, representatives from the FAO, UNCTAD, UNESCO, and the World Bank met in Rome to discuss the paper question. They supported in theory the creation of an international strategic paper reserve, but also observed that stockpiling on this scale was 'hardly a commercial proposition'.[90] UNESCO tasked Carl Bergendahl, a Swedish forestry consultant, with studying a scheme. Beyond the obvious financial challenges, Bergendahl concluded that the wide variation specifications of paper required by the sector constituted an obstacle to stockpiling reserves for use in a time of crisis.[91] The initiative ultimately yielded no concrete proposals and was quietly abandoned.[92]

Much as in the case of the global food crisis, international agencies emphasised the need to confront the deeper structural problems in the paper sector, rather than simply firefighting present shortages.[93] In early 1974, an FAO survey warned that the situation would continue to be extremely worrying even once the current crisis had passed. The FAO's director-general, Addeke Boerma, forecast 'an extremely serious shortage of all paper products during the years to come', since 'the new capacity planned by the industry to come to production during the next five years will not improve the supply situation; on the contrary, the deficit will grow at an accelerated rate'. Boerma suggested to the United Nations Development Programme (UNDP) that it was the responsibility of international organisations to take the initiative.[94] In May 1974, the FAO and the UNDP established a multiphase Pulp and Paper Industries Development Programme to provide a comprehensive response to the challenge. They tasked Roshan Bhargava, an Indian paper expert and industrialist, with producing an initial study.

On a more conceptual level, international technocrats reckoned with the implications of the crisis for their models of development. Inside the FAO and UNESCO, there was a turn away from the shibboleths of 'communications for development' theory, which had postulated a direct connection between education, literacy, and the consumption of paper. The 'famine' punctured this confidence. 'The experience of FAO projections [of newsprint consumption] has illustrated eloquently the difference between forecasts and reality', observed a UNESCO report on *Cultural Paper*. It questioned the links between gross domestic product (GDP), literacy, and paper consumption. 'A direct link may not be proved between literacy and consumption of newsprint ... There are many "development" paths, expressing different choices, tastes and customs', UNESCO noted. 'It is true that when no one can read, there is no point in printing newspapers', it reflected, in a move away from the 'communications for development' approach

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[88]Report of Meeting of Experts on the Development of the Periodical Press in Asia, Tokyo, 11–17 June 1974, UNESDOC, COM.74/CONF.614/5.

[89]*Records of the General Conference, Eighteenth Session, Paris, 17 October to 23 November 1974* (UNESCO, 1975), vol. 1, 66–7.

[90]'The World Newsprint Shortage', *UN Chronicle* 21, no. 6 (1975): 164–6.

[91]Carl J. Bergendahl, 'The Supply of Cultural Paper in Asia', *Asian Book Development Newsletter* 10, no. 4 (1979): 4–9.

[92]Olivier Le Brun, 'Impact Evaluation of UNESCO's Activities in Endogenous Production of Programmes and Messages in the Field of Communications, since 1981' (1988), UNESDOC, 129EX/INF.9.

[93]Lee, 'Solution Redefined'.

[94]Boerma to Peterson, 3 April 1974, FAO Archives, 17/FO/FO3-400, vol. 1.

that postulated that increasing access to paper would drive literacy levels upwards. The report also acknowledged that different reading cultures shaped levels of print consumption (in terms of actual newspapers bought), especially in times of scarcity, since 'for a country at a still low level of literacy, any increase of that literacy might only mean a larger number of readers of the same newspaper both inside the family or outside it'. There was an expectation, too, that the accessibility of radio and increasingly television might mean that developing states would not replicate the same historical demands for paper as industrialised economies. 'The developing countries of to-day', concluded UNESCO, 'belong to a different "time"; the paths of their development will be, when compared with the so-called developed countries of to-day, through evolving form and manners of communication different from those which have accompanied the latter on their development paths'.[95]

Such thinking reflected broader shifts in approach to communications at UNESCO. In the slipstream of the NIEO, Third World states developed a critique of the globe's communications infrastructure and the cultural imperialism which they claimed it reinforced. Proponents of a 'New World Information and Communications Order' (NWICO) argued that just as the liberalisation of world trade prevented the development of former colonial territories, so contemporary structures of global news diffusion ensured the predominance of powerful media houses and news agencies in more developed states. This facilitated the agendas of the superpowers, especially Western consumerism and individualism, over the development of indigenous and national culture. At UNESCO, the NWICO found support from its new Senegalese secretary-general, Ahmadou-Mahtar M'Bow, who was appointed in 1974.[96]

As both a bulk commodity and a medium of communication, paper demonstrated how the relative weakness of cultural production in the Third World was rooted in the structural inequalities in global manufacture and trade. Closing UNESCO's general conference in November 1974, M'Bow cited the paper shortage and 'the control of [newsprint] production in a manner prejudicial to certain countries, particularly the least developed', as issues which were 'inextricably bound up' in debates about the 'free flow of information'.[97] In 1976, M'Bow set up a commission to investigate 'Third World communication problems', chaired by Séan MacBride. This commission published its findings four years later. *Many Voices, One World* identified three major challenges to the goal of 'greater independence and self-reliance' in communications which required 'concerted international action': tariff structures, the electromagnetic spectrum—and paper. 'The worldwide shortage of paper, including newsprint, and its escalating cost impose crushing burdens upon struggling newspapers, periodicals and the publication industry, above all in the developing countries', it stated. The report recommended a 'major international research and development effort to increase the supply of paper'.[98] The challenge remained one of putting these principles into practice, by constructing new paper mills in the Third World.

New experiments: small mills and sugar paper

While the high-level projects of the NIEO and NWICO looked to build a new world order, technocrats, industrialists, engineers, and scientists engaged in the technicalities in developing

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[95]UNESCO, *Cultural Paper* (Paris: UNESCO, 1978), 11, 17, 18.

[96]Vanessa Freije, 'The "Emancipation of Media": Latin American Advocacy for a New International Information Order in the 1970s', *Journal of Global History* 14, no. 2 (2019): 301–20; Jonas Brendebach, 'Contested Sovereignties: The Case of the "New World Information and Communication Order" at UNESCO in the 1970s', in Gregor Feindt, Bernhard Gissibl, and Johannes Paulmann, eds., *Cultural Sovereignty beyond the Modern State: Spaces, Objects, and Media* (De Gruyter Oldenbourg, 2021), 106–27; Sarah Nelson, 'Networking Empire: International Organizations, American Power, and the Struggle over Global Communications in the 20th Century' (PhD diss., Vanderbilt University, 2021), ch. 5.

[97]M'Bow, 'Address at the Closure of the Eighteenth Session of the General Conference', 23 November 1974, UNESDOC, 18 C/INF.19, DG/74/15.

[98]UNESCO, *Many Voices, One World* (UNESCO, 1980), 257.

paper capacity in the Third World. Their approaches were both quantitative and qualitative. First, experts revisited the question of the appropriate scale for paper mills in relatively small, if growing, markets in the developing world. Second, they experimented with producing pulp and paper from alternative, locally available materials, which would release them from dependency on expensive imports. But these projects yielded disappointing returns and the shift in the global economic and political climate in the 1990s opened a new chapter in UNESCO's approach to newsprint.

Prior to the crisis, as we have seen, experts concluded that Third World domestic consumer markets were too small to justify the construction of mills of an economically sustainable size. But the circumstances of the 1970s brought renewed interest in these possibilities. In the spirit of the NIEO, there was a renewed attempt to support developing economies through building relationships between Third World states. For example, the oil shock gave rise to a period of renewed African-Arab cooperation, as petroleum exporters answered calls for the redistribution of the OPEC windfall to assist stricken African economies. A UNESCO meeting of Arab newspaper experts in Tunis in 1976 suggested that petrodollars could be invested in the construction of a newsprint mill south of the Sahara, which could then supply both African and Arab states.[99] Nothing came of this initiative, as the moment of African-Arab solidarity soon passed.

But perhaps such grandiose plans were unnecessary. In the 1970s, there was a shift away from older models of large-scale mills towards smaller, bespoke projects tailored for domestic markets. This reflected a broader questioning of conceptions of scale in economic growth and paths to development. E. F. Schumacher's influential *Small is Beautiful* challenged conventional wisdom regarding the economies of scale. Schumacher advocated the development of technologies which were appropriate for local circumstances, rather than treating industrialisation in the North as a universal template.[100] Key figures inside UNESCO and the FAO shared his views. 'Some countries have fallen into what may be called "technological traps"', M'bow told UNESCO's 1974 general conference. 'Imitating others, they have adopted techniques calling for considerable capital, costly equipment and foreign specialists, which are not really suited to their needs.'[101] The former Guyana minister for development, Kenneth King became assistant director-general of the FAO's forestry department in 1974. Speaking to Canadian industrial stakeholders, he emphasised that 'the new technologist should not be blinkered by the old methods, the old ways. What are required are experts of imagination, initiative and intelligence.'[102] King called upon the developing world to 'not slavishly follow' the pattern established in industrialised countries. 'If the developing countries continue to be advised by "international experts" to adopt the practices and customs of the industrialized north in the field of pulp and paper, they will be forced to labour, like Sisyphus, without adequate reward for their onerous efforts', he told an audience in Germany. '[A] reverence for size is a snare and a delusion.'[103]

This ideological steer influenced the technical recommendations of the international organisations. The final report of the FAO-UNDP Pulp and Paper Industries Development Programme, which had been commissioned at the height of the 'famine', concluded that Third World states should invest in small-scale domestic mills based on the principle of self-sufficiency rather than export. It emphasised the wider benefits for the whole economy which paper mills created.[104] Above all, the FAO stressed the need for bespoke methods adapted to local needs and

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[99]'Réunion d'experts sur le développement de la presse périodique dans les états arabes', Tunis, 17–22 December 1976, UNESDOC, COM.76/CONF.611/7.

[100]E. F. Schumacher, *Small is Beautiful: A Study of Economics as if People Mattered* (Blonde & Briggs, 1973), 54.

[101]M'bow, 'Address at the Closure of the Eighteenth Session of the General Conference', 23 November 1974, UNESDOC, 18 C/INF.19, DG/74/15.

[102]K. F. S. King, 'The Forestry Sector and Economic International Relationships', *Weyserhauer Lecture Series* (November 1975), 10.

[103]K. F. S. King, 'The Political Economy of Pulp and Paper', *Unasylva*, no. 117 (1977).

[104]'Report on the UNDP/FAO Pulp and Paper Industries Development Programme' in FAO, *World Pulp and Paper Demand*, 309.

resources. As two FAO officials observed, 'it is unlikely that a standard solution can be found for a small-scale pulp and paper mill which would fit any raw material, any market situation, or any social and economic environment'.[105] Despite some misgivings among Western industrialists, the FAO's advisory committee established a working group to investigate the potential of small-scale mills in 1978.[106] Roshan Bhargava, who had written the original FAO-UNDP report, readily took up an invitation to the committee, citing successful examples of small mills in India.[107] His own consultancy firm proposed to Third World governments, including Kenya, that '[t]he concept of "economies of scale" must have a different meaning and should be modified for the developing countries where inadequate capital, undeveloped infrastructure, lack of capable management and technical skills and a strong need for developing the rural economy are the dominating factors'.[108]

Alongside this investigation into scales of production, there was a newfound interest in manufacturing paper from alternative materials. The commodity shocks of the 1970s encouraged technological experimentation. In seeking to wean their economies off oil and conserve foreign exchange, Third World governments sought different, locally sourced materials for development, such as a Brazilian project to produce ethanol biofuel from sugarcane and Tanzanian initiatives to replace concrete with bricks fired in wood-fuelled kilns.[109] Similarly, the paper crisis revived earlier interest in new sources of newsprint in the Third World. 'In 1973–74 the world suddenly realised, through the oil crisis, that the colossal waste of our natural resources had gone too far', observed a Kenyan government report on plans for manufacturing newsprint using sisal.[110] A meeting of publishing experts in Nigeria in December 1973 recommended research into papyrus as an indigenous source of pulp. A Cairo-based American publisher wildly claimed that papyrus could be 'Africa's "white oil", perhaps a billion dollar industry in itself'.[111] More soberly, the FAO's King spoke optimistically about recent progress in producing paper from tropical hardwoods and alternative fibres. Whereas previously the nature and diversity of forests in tropical regions had been seen as a barrier, now they were viewed as a potential solution to problems of sustainability. In light of concerns about the future of coniferous forests, he explained that plantations in tropical regions took only 10 to 15 years, in comparison with 20 to 30 years in temperate regions.[112]

In particular, the paper crisis renewed interest in manufacturing newsprint from bagasse. The report of the MacBride Commission recommended that UNESCO take 'urgent measures' to research new forms of paper manufacture, especially from bagasse.[113] In 1976, Peru announced that it would open a plant capable of producing 110,000 tons of newsprint from bagasse. The project cost $80 million, but the rise in global prices meant that it would save $30 million in imported pulp per year.[114] Among the most promising initiatives was a Cuban bagasse newsprint project, which received support from the UNDP. In an act of Third World solidarity, the Cuban government declared its intention to share the findings of its results with other sugarcane

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[105]A. J. Leslie and Börje Kyrklund, 'Small-Scale Mills for Developing Countries', *Unasylva*, no. 128 (1980).

[106]Nineteenth Session of FAO Advisory Committee on Pulp and Paper, Rome, 31 May–2 June 1978, FAO Archives, 17/FO/FO3-401, vol. 25.

[107]Bhargava, 10 August 1978, FAO Archives, 17/FO/FO3-401, vol. 25.

[108]Bhargava Consultants Private Limited, n.d. [c.1977], Kenya National Archives [KNA], XZ/1/49.

[109]Jennifer Eaglin, *Sweet Fuel: A Political and Environmental History of Brazilian Ethanol* (Oxford University Press, 2022); Emily Brownell, *Gone to Ground: A History of Environment and Infrastructure in Dar es Salaam* (University of Pittsburgh Press, 2020).

[110]'Manufacture of Newsprint from Sisal Waste', n.d. [1978], KNA, XZ/5/12.

[111]Edwina Oluwasanmni, Eva McLean, and Hans Zell, eds., *Publishing in Africa in the Seventies* (University of Ife Press, 1975, 1).

[112]K. F. S. King, 'It's Time to Make Paper in the Tropics', *Unasylva*, no. 109 (1975).

[113]UNESCO, *Many Voices, One World*, 257.

[114]'Peru Making Paper from Sugar Cane', *New York Times*, 25 April 1976, 15.

producers, including Mexico, Ethiopia, Egypt, and Pakistan.[115] Yet just as the paper crisis refocused attention on bagasse newsprint, the oil shock made it more difficult to exploit its opportunities. Although bagasse was the waste product from processing sugarcane, it was recycled as a fuel for boiling the raw sugarcane itself—a use that became even more important in a time of spiralling oil prices. For example, the Kenyan government turned down an approach from a European firm for investment in a bagasse newsprint plant not only because the technological prospects remained unconvincing, but also due to a reluctance to divert bagasse from its use as fuel.[116] In another reflection of the close relationship between the paper famine and the higher-profile petroleum shock, the trade magazine *Pulp & Paper International* noted that the oil crisis 'seriously clouded' the future of bagasse paper. 'Whether new, large bagasse projects remain feasible with high oil prices and questionable supply is doubtful, particularly in Third World countries which import oil', it concluded.[117]

Although the outcomes of these experiments in the scale and means of newsprint production were disappointing, the situation in the developing world generally improved in the 1980s. Whereas the Third World produced 40% of the newsprint it consumed in 1980, by 1988 this figure exceeded 60%. Yet manufacturing was concentrated in a small number of countries. Of the 3 million tons produced by developing states, 1.8 million tons were manufactured by eight states in Asia, 1.1 million tons by four states in Latin America, and just 100,000 by four African states. The rest of the global South remained dependent on expensive imports.[118] Furthermore, the paper industries which did exist were undermined by fluctuations in global supply and demand. The economic downturn in the United States created a glut of paper which manufacturers 'dumped' on developing states. Pedro Picornell, the Filipino industrialist, complained that the paper sector in his country faced 'immediate collapse' in late 1982 for this reason.[119] Debates among the FAO's advisory committee pitted those who defended protection of Third World paper industries against the free market thinking emanating from the international financial institutions.[120] Yet import substitution strategies were not only criticised by advocates for economic liberalisation, since they had little to offer the media in the Third World, which picked up the bill for the high prices at which inefficient domestic mills sold newsprint. For example, a mill at Mufindi in Tanzania, which was part funded by the World Bank and opened in 1985, proved a white elephant. Its paper cost almost twice as much as imported newsprint, which already carried a 20% import duty. While the country's state- or party-owned daily newspapers had better access to credit and subsidies which provided some cushioning, these high prices pushed smaller, independent publications out of business.[121]

On a political level, the wind went out of the sails of UNESCO's attempts to improve access to paper. The debate about the NWICO was predictably confrontational. The commission which produced *Many Voices, One World*—M'bow's flagship report—revealed ideological divisions even among proponents of a NWICO.[122] In 1983, the United States signalled its disillusionment with the political direction of UNESCO by leaving the organisation, shortly followed by Britain. By the mid-1980s, UNESCO had ceased to play a key role in the international campaign for improving access to newsprint. In 1985, it abandoned an inquiry into the problem of paper production and

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[115]'United Nations Aids Project for Making Newsprint from Sugar Cane', *UN Chronicle* 12, no. 5 (1975): 32–3; Oscar L. Garcia Hector, 'Bagasse High Yield Pulping for Sugar Mills', in Jörg Becker, ed., *Small Pulp and Paper Mills in Developing Countries* (Concept, 1991), 147–56.

[116]B. J. M. Obiri, 'The Availability of Bagasse for Newsprint Manufacture in Kenya: A Preliminary Study', 20 May 1977, KNA, XZ/5/12.

[117]'For Once It Doesn't Look So Bad for Paper', *Pulp & Paper International*, March 1974, 74.

[118]Leo Lintu, 'The World Market Situation and New Trends in Newsprint', *Unasylva*, no. 167 (1991).

[119]Pedro M. Picornell, 'Protection of the Pulp and Paper Industry: An Opinion from a Developing Country', in FAO, *Establishing Pulp and Paper Mills: A Guide for Developing Countries* (FAO, 1983), 67–71.

[120]For a sceptical view of protectionism, see the World Bank's Salah El Serafy in *ibid.*, 62–6.

[121]Anthony Ngaiza, 'Paper at a Price: Southern Paper Mill, Tanzania', *Ambio* 16, no. 5 (1987): 280–6.

[122]Freije, 'Emancipation of the Media', 318–9; Lemberg, *Barriers Down*, 189–202.

consumption on the basis that UNESCO could make a 'comparatively limited contribution' to resolving what was fundamentally a question of international trade.[123] Arguments about communications within UNESCO increasingly gravitated towards matters of telecommunications and information technology. A report commissioned by UNESCO to address missing links between the parallel agendas of the NIEO and the NWICO concentrated on electronic data; even where it drew attention to material infrastructure of print communication, its discussions were confined to the manufacture of presses—without any regard for paper.[124]

The end of the Cold War and the rise of free market orthodoxy brought about a shift in UNESCO's approach to the media. Its new strategy for communications departed sharply from the Third Worldist radicalism of the M'bow era in favour of a return to ideas about the 'free flow of information'. In Africa, democratic revolutions and economic liberalisation opened spaces for the private media. Responding to these changing times, UNESCO supported a seminar on 'Promoting an Independent and Pluralistic African Press', held in Windhoek in newly independent Namibia in 1991. A report submitted to the meeting identified 'the problem of newsprint' as the 'truly threatening danger to the development of new newspapers'. Even as newsprint costs rose, government-owned titles had at least continued to have access to state funding or credit lines with printers. Independent publishers were more vulnerable: their greater dependence on advertising revenues and competition for readers meant that a failure to print an edition due to paper shortages could have catastrophic consequences for a new title's survival.[125]

Attention now shifted from global inequalities in access to newsprint towards legal and political restrictions *within* states. The Windhoek seminar admittedly supported the creation of a continental board for the purchasing of newsprint for Africa. But, in place of calls for a more equitable distribution of affordable newsprint, its final declaration focused more on internal obstacles facing an independent media. The meeting inspired UNESCO-organised events for Central Asia in Alma Ata (1992), Latin America and the Caribbean in Santiago (1994), and the Arab world in Sana'a (1996), which issued almost verbatim recommendations. When they mentioned the problem of newsprint, the solution was deemed to be greater liberalisation in the trade, rather than active redistribution, with the onus placed on developing states rather than the international community. The Sana'a Declaration called on Arab governments 'to initiate action to remove economic barriers to the establishment and operation of news media outlets, including restrictive import duties, tariffs and quotas' for products including newsprint.[126] In a time of economic liberalisation and democratic pluralism, a free press was deemed best guaranteed by an absence of government intervention, leaving newspapers to fight for newsprint supplies in the global marketplace.

Conclusion

Far from laying to rest the spectre of the 'paper famine', the shift from print to digital media has created new shortages into the present. For over a decade to 2020, the newsprint industry was a buyers' market, as mills competed for shrinking business amid falling newspaper circulation. During the coronavirus pandemic, mills converted their operations for the more lucrative market for packaging, which had been stimulated by the growth of e-commerce under 'lockdown' conditions. When the demand for newsprint bounced back, there was therefore reduced capacity

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[123]UNESCO Executive Board, 'Statement and Evaluation of Major Impacts, Achievements, Difficulties and Shortfalls for Each Continuing Programme Activity in 1984–1985', 23 August 1985, UNESDOC, 122 EX/11.

[124]Breda Pavlič and Cees J. Hamelink, *The New International Economic Order: Links between Economics and Communications* (UNESCO, 1985).

[125]Michel Duteil and Mireille Duteil, 'The Press in Francophone Africa', in 'The Socio-Economic Parameters of a Viable Independent Press in Africa', Seminar on Promoting an Independent and Pluralistic African Press, Windhoek, 29 April–3 May 1991, UNESDOC, OPI.91/WS/7, WIN/91/3.

[126]See UNESCO, *Basic Texts in Communication 89–95* (UNESCO, 1997).

for meeting newspapers' needs.[127] Overall, global newsprint capacity halved from 23.8 million tons to 13.6 million tons from 2017 to 2022. Just as in the 1970s, high global fuel prices, which were exacerbated by the outbreak of the Russia-Ukraine war, raised production costs for this energy-intensive industry. Finally, a lengthy strike at the Finnish mill UPM caused a significant cutback in production.[128]

The result was a major hike in the newsprint price, which once again hit the global South hardest. In India, the cost per ton of imported newsprint doubled from $450 in 2019 to $950 in 2022.[129] Media representatives complained to their governments about tariff barriers and discriminatory policies. In Tanzania, newspapers called on the government to revise its 10% levy on newsprint imports after prices rose in an 'unsustainable' fashion by 110% in two years.[130] In Mauritania, independent news outlets alleged that the national press refused to print their newspapers due to the shortage—but still published state-owned titles.[131] Yet far from representing short-term supply problems, these dynamics are the product of a paper economy still tilted heavily against the South. An Indian media spokesperson noted that the development of the country's newsprint sector had been undermined by the 'dumping' of surplus paper by exporters in the global North.[132]

This article has shown how, in the era of decolonisation, international technocrats came to view paper as a core material infrastructure for their hopes for Third World development. In the early 1970s, disruptions to paper supply chains, which were amplified by broader anxieties about sustainable growth and aggravated by intersecting energy and food crises, rippled through the developing world to push many newspapers to the brink of existence. The effects of the 'paper famine' contributed to the breakdown of earlier models of 'communications for development' in organisations like the FAO and UNESCO and a search for new modes and means of newsprint manufacture appropriate for developing states, led by Third World forestry experts. But the failure of these initiatives, like the NIEO and the NWICO, serves to highlight the deep and continuing economic and technological barriers which contoured the development of the press in the global South. The FAO and UNESCO provided fora for constructive engagement with the 'paper problem', but the interests of global capital proved too powerful for international organisations to redress it effectively.

In tracing this history, we can see how literally looking beyond the headlines—or any other feature of a newspaper—and taking seriously the fibrous material upon which they were printed reveals that even the most parochial of newspapers was bound up in global supply chains which stretched from the forest to readers at breakfast tables or streetside newsstands. 'By focusing on materiality, historical writing on communications networks becomes literally grounded' and emphasises their 'inherent embeddedness' in a wider political economy, writes Richard John.[133] Newspaper proprietors, editors, government officials, and technocrats were, as this article has shown, deeply aware of the global politics involved in the manufacture, trade, and distribution of newsprint. Global historians might share their sensibilities in pushing forward future research. Bringing together the histories of commodities and communications into the same space leaves us

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[127]'Soaring Newsprint Costs Make Life Even Harder for Newspapers', *Economist*, 6 November 2021, https://www.economist.com/business/2021/11/06/soaring-newsprint-costs-make-life-even-harder-for-newspapers.

[128]Malin Hay, 'Paper Cuts', *London Review of Books*, 24 March 2022, 22.

[129]'How the Ukraine War Has Created a Crisis for Indian Newspapers', *Times of India*, 17 March 2022, https://timesofindia.indiatimes.com/india/how-the-ukraine-war-has-created-a-crisis-for-indian-newspapers/articleshow/90297695.cms.

[130]'Editor's Plea to Government over High Printing Costs', *Citizen*, 11 March 2022, https://www.thecitizen.co.tz/tanzania/news/national/editors-plea-to-government-over-high-printing-costs-3744130.

[131]'Paper Shortage in Mauritania Paralyses Printing of Private Newspapers', CGTN Africa, 15 June 2023, https://africa.cgtn.com/paper-shortage-in-mauritania-paralyses-printing-of-private-newspapers.

[132]'News, But No Paper: India Has a Huge Newsprint Problem, But It's Been Brewing a While', ThePrint, 17 May 2022, https://theprint.in/india/news-but-no-paper-india-has-a-huge-newsprint-problem-but-its-been-brewing-for-a-while/955829/.

[133]John, 'Debating New Media', 327.

with a stronger understanding of the material factors which shape the evolution of the media, as well as the cultural and political dimensions of the trade in paper, as a ubiquitous but routinely overlooked consumer good.

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