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Covid-19 and the forestry sector in Africa

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Abstract

This paper examines the economic impacts of Covid-19 on timber/forest products exporting countries in Africa in terms of export flows, price fluctuations, lost revenues and employment. Globally, in the forestry sector, the COVID-19 pandemic is known to have caused production shutdowns, supply chain disruptions, suspensions, postponements and cancellation of production and export operations. The paper shows that the magnitudes, flows and prices of wood products have all been impacted by the COVID-19 pandemic raising questions on options for economic resilience and sustainable green economies. At the national and international levels, contemporary reflections and dialogues are ongoing on the impacts of COVID-19 pandemic on people and forests in terms of the main issues, response needs and opportunities to help mitigate and address the situation in the short-term while at the same time contributing to building a more resilient and sustainable future. Such a future is expected to address the vulnerabilities of communities to shocks, provide support responses to enterprises, provide good governance and financial measures in handling future crises as well as capitalize on the ways that the forestry sector can contribute to building sustainable and resilient societies.

Keywords: Covid-19 pandemic, socioeconomic impacts, economic resilience, forestry, Africa

Introduction, scope and main objectives

Globally, COVID-19 is killing thousands of people daily and has resulted in mass production shutdowns and supply chain disruptions, briefly coined as 'supply-demand shocks'. This has ripple effects on all economic sectors including forestry. Looking at the African context, although COVID-19 does not directly affects forests and trees, forestry is subject to its indirect impacts because of changing consumer demands, social distancing, sanitary measures, closures and logistical problems related to transportation. The vivid question that ponders the mind: what are the social, economic and environmental impacts of the pandemic on the forestry sector and what options are available for countries to cushion them? This study examines the economic impacts of Covid-19 on timber exporting countries in Africa in terms of export flows, price fluctuations, lost revenues and management. Also reviewed are country relief measures and strategies for mitigating the impact of COVID-19 on the sector. Recommendations are proffered to assist governments and the private sector to make informed decisions on how to better handle future development and resilience to shocks.

Methodology/approach

The study involves the review of scientific literature and press releases on COVID-19 related socio-economic disruptions in the forestry industry in Africa. However, more focus is put on six African countries (Cameroon, Gabon, Ghana, Liberia, DR Congo and Republic of Congo) with high volumes of timber production and exports. The study employed expert interviews with forestry stakeholders on the likely impacts of COVID-19 on the forestry sector in Africa. To showcase impacts, with available data, year-on-year or period-on-period comparisons were made for 2020 and 2019 timber values/volumes.

Results

Impacts on Africa's forestry and timber sector

In Africa, the impacts of the coronavirus pandemic are on the production, flow of wood products to various destinations, ability of companies to export products, price fluctuations, amongst others. For instance, in 2019, 122 timber companies in Cameroon exported 1 459 410 m³ of primary wood products (logs-38%, sawnwood-55.7%, plywood-0.6%, and veneers-5.7%) to 71 countries spread over the world (Tieguhong *et al.* 2019). This international export practice holds true for other African timber producing countries bringing to fore how COVID-19 linked changes in demand in importing countries can indirectly impact timber trade. Some of the impacts in the African forestry sector are discussed in terms of the dynamics of timber exporting companies in countries, changes in unit prices, changes in export destinations, export volumes and values, species preferences and management.

Number of timber exporting companies

The coronavirus pandemic led to exits and new entrants of timber exporting companies in Africa. For instance, in Liberia, for the period of December 20018 to March 2019, seven companies exported timber while for the period of December 2019 to March 2020, 13 companies exported. However, only four of those that exported in Dec18-March2019 also exported in Dec19-March2020 period in varying volumes and values (Table 1). This implies that there were three exists and nine new entrants as exporters of timber in Liberia in 2020.

Table 1: Comparisons of four companies Dec.2018-March2019 vs (Dec.2019-March 2020)*

Company	Volume (m ³)	Total cost (US\$)	Value/ vol.	% volume	% value	Difference (% value-%volume)
Alpha Logging and Wood Processing Inc,	4539 (4773)	59640 (104535)	13.1 (21.9)	11.9 (9.4)	12.1 (11.5)	0.1 (2.1)
International Consultant Capital (ICC),	21093 (34286)	228346 (561280)	10.8 (16.4)	55.4 (67.6)	46.1 (61.6)	-9.3 (-6.1)
Mandra Forestry Liberia Ltd, Monrovia (Liberia)	11077 (10409)	192541 (218118)	17.4 (21.0)	29.1 (20.5)	38.9 (23.9)	9.8 (3.4)
SING AFRICA PLANTATIONS LIBERIA INC,	1370 (1240)	14387 (27965)	10.5 (22.5)	3.6 (2.4)	2.9 (3.1)	-0.7 (0.6)
Total	38078 (50709)	494914 (911899)	13.0 (18.0)	100.0 (100.0)	100.0 (100.0)	0.0

*values in brackets () are those of Dec2019-March 2020 period

In **Ghana**, while comparing 2019 and 2020 in terms of the number of exporters, the number of products shipped, the number of species shipped, and the number of countries shipped to, the general trend showed a decrease in February 2020 compared to February 2019 for the first three variables and no change for the last one (Figure 3).



Figure 3: 2019 to 2020 comparisons of exporters, products shipped, number of species and number of importing countries. Source: ITTO 2020a

Changes in export destinations

Predicted or not, the coronavirus pandemic led to changes in export destinations of timber favouring countries with less restrictions on imports. For instance, for the period of December 2018 to March 2019, Liberia exported timber to four international destinations (China, Bangladesh, France, India) but in the period of December 2019 to March 2020, timber was exported to seven destinations, including three new destinations (Vietnam, Turkey, Hong Kong). Over these year-on-year periods, varying volumes/values of timber products were imported from Liberia by the destination countries (Table 2).

Table 2: Timber exports per destination during Dec.2018-March2019 vs (Dec2019-March2020)

Destination	Volume (m3)	Value (US\$)	Unit prices (US\$/ m3)	% volume	% value	Difference (% value - % volume)
China	21437 (33966)	232691 (486666)	10.9 (14.3)	50.8 (48.5)	42.3 (38.9)	-8.5 (-9.6)
Bangladesh	19207 (32495)	299830 (701193)	15.6 (21.6)	45.5 (46.4)	54.5 (56)	9.0 (9.6)
France	322 (2192)	4781 (48771)	14.9 (22.2)	0.8 (3.1)	0.9 (3.0)	0.1 (0.8)
India	1250 (1355)	12688 (15444)	10.1 (11.4)	3.0 (1.9)	2.3 (1.2)	-0.7 (-0.7)
Grand Total	42216 (70007)	549990 (1252074)	13.0 (17.9)	100.0 (100.0)	100.0 (100.0)	0.0

*values in brackets () are those of Dec2019-March 2020 period

Dynamics in export volumes and values

Year-on-year or period-on-period decrease or increase in shipments of wood products reflect the impact of the pandemic in the forestry sector. Examples are drawn from Ghana, Liberia and Gabon to that show contrasting outcomes. In 2019, Ghana's timber exports of a total 300 445 m³ of wood products worth 150.63 million Euros were shipped to five regular major markets: Asia (67%), Europe (16%), Africa (11%), America (4%) and Middle East (2%) (ITTO 2020a). All these regions were impacted by the pandemic. For instance, in the first two months of 2020, Ghana exported a total of 35,508 m³ of wood products earning Euro 17.64 million compared to 2019 respective figures of 53 171 m³ valued at Euro 28.04 million, giving a decline of over 30% in volume and value (ITTO 2020b). Contrary to the decline in Ghana, Dec.2019-March2020 saw an increase in shipments of logs (82 831 m³ valued at US\$ 1 463 816) from Liberia over the same period in 2019 (42 216 m³ valued at US\$ 549 990). This gives 96.2% and 166% increase in volume and value of Liberian logs exported in first quarter of 2020.

Unit timber price changes

The unit prices of timber exports vary with destination, export company and the timber species being exported. Using data from Liberia, the unit prices of logs saw an increase in the period of Dec.2019 to March 2020 over the same period in 2019 for both destination countries, the export companies and flagship timber species (Figure 4, Figure 5 respectively).

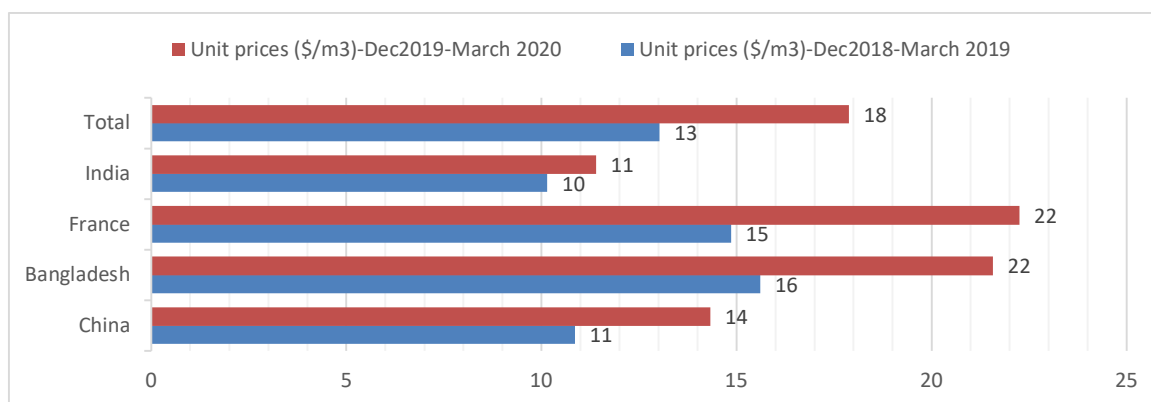


Figure 4. Comparison of 2019 and 2020 FOB prices per cubic metre of logs by importing countries from Liberia

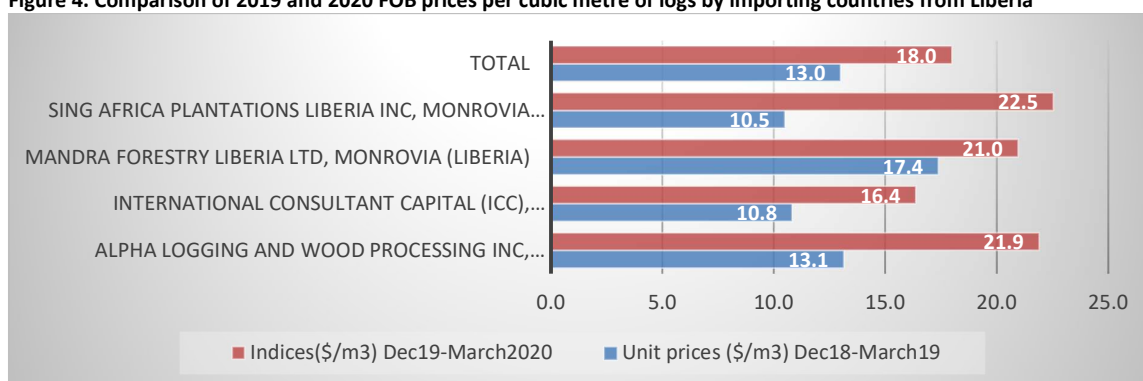


Figure 5: Comparison of 2019 and 2020 FOB prices per cubic metre of logs exported by company from Liberia

Still in Liberia, the demand for logs from 10 flagship trees species saw 38% increase in price per cubic metre in the first quarter of 2020 as compared to the first quarter in 2019, indicating preferences and competition for them in the markets. Overall during the first quarter of 2020, the volume of logs exported was represented by 69 species as compared to 60 species during the same period in 2019. Indeed, logs from tree species like *Afzelia* spp. (AFZ), *Entandrophragma cylindricum* (ENTCY), *Heritiera utilis* (TAR) and *Entandrophragma utile* (ENTU) saw increases of over 60% in unit prices in the first quarter of 2020 compared to the same period in 2019. The unit prices of most other species including *Brachystegia leonensis* (BRA), *Terminalia ivorensis* (TEI) and *Tetraberlinia tubmaniana* (TET) did not vary much but those of *Lophira alata* (LOP), *Nauclea diderrichii* (NAU), *Chlorophora* sp. (CHL) also saw significant increases in 2020 compared to 2019 (Figure 6).

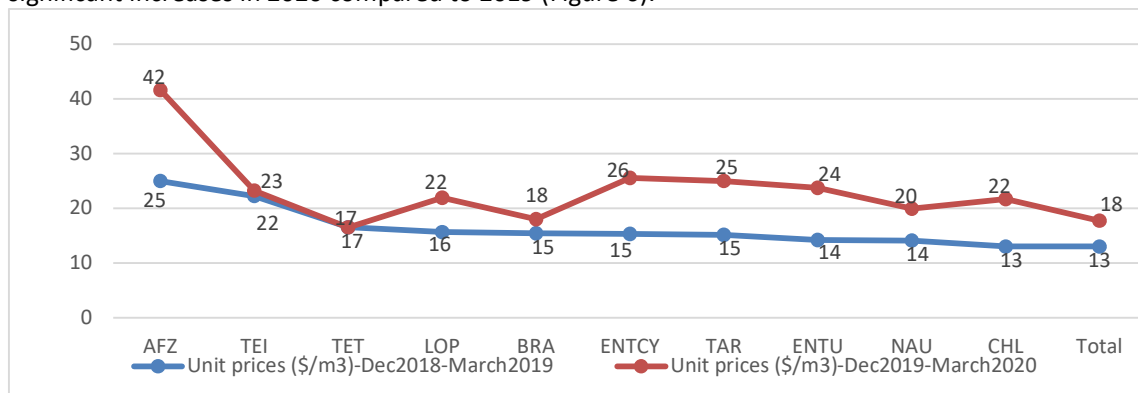


Figure 6: Comparison of unit prices of ten top timber logs by species exported from Liberia (Dec 2018 to March 2019 vs Dec 2019 to March 2020)

Contrary to the trend in Liberia, the overall impacts of the pandemic in West/Central Africa on unit prices for both logs and sawnwood by tree species were on the decline. When unit FOB prices of logs were compared by tree species (bilinga- *Nauclea diderrichii*, iroko-*Militia excelsa*, okan- *Cylicodiscus gabunensis*, padouk- *Pterocarpus soyauxii*, sapele-*Entandrophragma cylindricum*, sipo/utile-*Entandrophragma utile* and tali- *Erythrophleum ivorense*) for the period Jan-May 2019 and those of the Jan-May 2020 period in West/Central Africa, we saw consistent higher prices for the pre-coronavirus period in 2019. For example, the unit price of bilinga was US\$ 320/m³ in January 2019 but dropped to US\$ 270/m³ in Jan-May 2020 period. The price of Tali was consistently higher in 2019 at US\$ 370/m³ than in Jan-May 2020 at US\$ 300/m³ (Figure 7). This trend holds true for sawnwood prices over the same comparable periods in 2019 and 2020, depicting the direct impact of the pandemic on the value of timber products in West/Central Africa (Figure 8). Other analysts confirm the drop of price indices for grade logs of ayous- *Triplochiton scleroxylon*, bilinga, sapelli and iroko between January and March 2020 as compared to the same period in 2019 with similar trends for the sawnwood from ayous/obeche, okoume- *Aucoumea klaineana*, sapelli and iroko (ITTO 2020d).

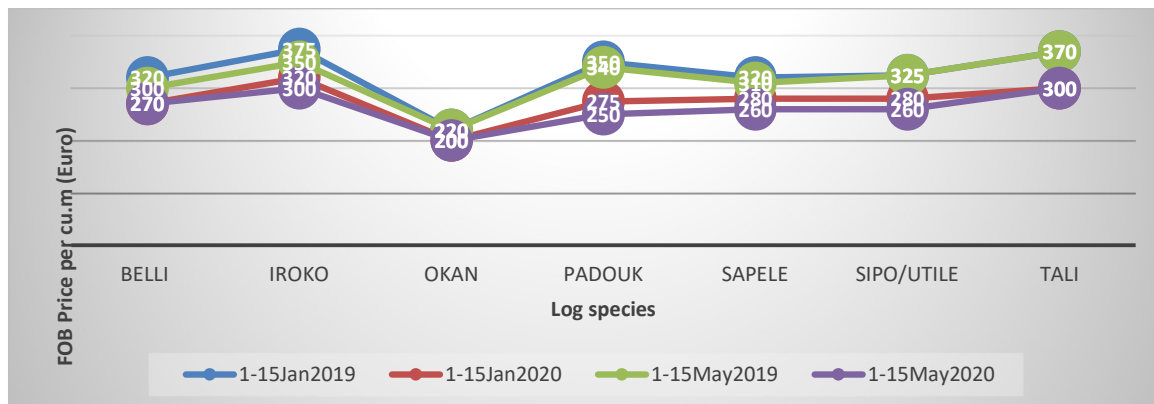


Figure 7: Comparison of 2019 and 2020 FOB prices per cubic metre of logs by species from West/Central Africa

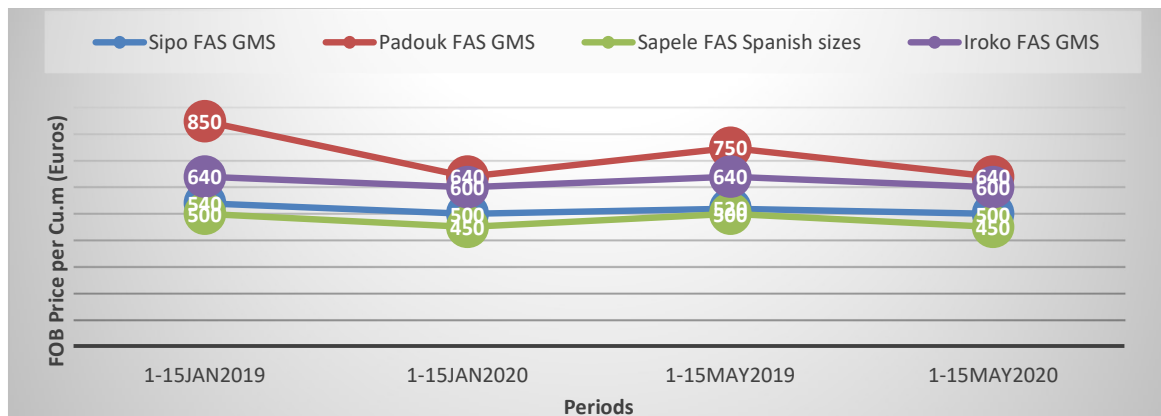


Figure 8. Comparison of 2019 and 2020 FOB prices per cubic metre of sawnwood by species from West/Central Africa For Jan-May 2019 and Jan-May 2020.

Impact on forest management

The three principles that guide today's concept of ecologically sustainable forest management dwell on the need to maintain the ecological processes within forests, preserve their biological diversity and obtain for adjoining communities the full range of environmental, economic and social benefits from

all forest uses within ecological limits. This implies that with social distancing and lockdown measures to combat the COVID-19 pandemic, direct and indirect impacts are expected for sustainable forest management in Africa. An understanding of these potential impacts is envisaged to help forest owners and managers to better prepare for present and future mitigation actions against pandemics.

Indeed, during the coronavirus pandemic, forest biodiversity is expected to increase due to suspension of logging that leads to deforestation and forest degradation (Corletta *et al.* 2020). Silvicultural practices including tree planting and tending operations are expected come to a drastic halt due to complete lockdowns in some countries. Weak supervision may lead to illegal logging as exemplified by the Ghanaian Forestry Commission Illegal Timber Task Force that intercepted and impounded trucks loaded with illegal timber in the Oti Region (ITTO 2020b). Labour productivity in forest management operations is expected to be negatively affected by ill-health, absenteeism, insecurity, fear and emotional instability. Workforce availability is expected to decrease associated with lockdowns, death, lapse of recruitment or layoff of part-time/permanent staff and relocation. These will fragment and reduce the efficiency of logging and tree planting crews, bringing down production levels. For example, in Gabon, logging operations are ongoing at 70% partly blamed on the pandemic and partly to heavy rains (ITTO 2020d).

Impacts on investors, financing and shipment operations

Private investments are expected to be negatively affected as most managers/owners of forest concessions left to their home countries for holidays and were blocked by the concerns of pandemic. For example, in Liberia most of the Asian and European investors that are responsible for over 90% of timber produced in the country were unable to come back from holidays to commence production operations. This grounded timber production in 2020, meaning that what was exported in the first quarter of 2020 were stocks from 2019 production season. Sawmills in Cameroon were reportedly not operating because of fewer orders and no log supply due to COVID-19 control measures that delayed processing of documents as government offices function without the normal staff levels. In Cameroon, the process of concession re-negotiation has been stalled because of uncertainty due to the pandemic and with the closure of borders between Central African Republic and Cameroon producers could not transport to the seaport in Douala (ITTO 2020b).

In Ghana, the volume of cargo handled by the country's two seaports, Tema and Takoradi, declined by half a million metric tonnes in the first quarter of 2020 compared to the same period in 2019 (ITTO 2020b). Wood product arrivals at destinations in China, EU, US and others suffered from delayed port clearance, suggesting the importance of developing local and regional markets to absorb timber products in the light of external shocks (ITTO 2020d).

In DR Congo and the Republic of Congo there are slowdowns in activities within sawmills operating at half speed and more so in forest production crews. The port of Gabon undertook measures to ensure the continuity of operations for the transport of personnel for night shifts and 24 hours continuous daily operations (ATIBT 2020b).

Discussion

In most African countries, containment measures or responses to address the impacts of COVID-19 were put in place in terms of economic and social support mechanisms. However, in almost all the countries, direct government support to timber companies are not available but they benefit indirectly from general measures to facilitate trade such as providing advice and easing restrictions (ITTO 2020d). For instance, in Gabon it is reported that some 20% of local staff and 5% of experts have been laid off to meet safety, reduction of crowding and social distancing measures, but they are still receiving 50% of their basic salaries for upkeep (ITTO 2020d).

In Ghana, the Government received parliamentary approval to spend an additional GHC1.2 billion (US\$210 million) for 2020 (April to June) through the Coronavirus Alleviation Programme (CAP), aimed at providing financial stimulus to 200 000 small and medium enterprises (SMEs) in order to minimise job losses and address economic downturn through the National Board for Small Scale Industries (NBSSI). The Government also pushed forward the payment of taxes and supported companies by absorbing 100% water and 50% electricity tariffs for the months of April to June 2020 (ITTO 2020b).

In the Republic of Congo, the Ministry of Finance and Budget developed and published customs, fiscal and financial measures to support businesses, including forest-based companies. This was followed by decrees on the organization of the public service and memos signed by the Minister of Forestry to regulate activities (ATIBT 2020a).

Conclusions/ wider implications of findings

It is estimated that economies in Sub-Saharan Africa could lose between \$37 billion and \$79 billion in output losses in 2020 due to COVID-19 (ATIBT 2020b). The output losses will affect different economic sectors in varying forms and proportions. This is the case for the forestry sector in many African countries that produce and export timber to different destinations in the world. For example, slowdown in demand in China, largest Africa's single trade partner, negatively impacts African exports.

The flows and prices of wood products have all been impacted by the COVID-19 raising questions on economic resilience and sustainable green economies. Some authors argue that although the forestry sector is traditionally seen as more resilient, the multi-faceted contributions of the sector to broader development targets bears testament to the central it can play in social and economic recovery post COVID-19. Such a future is expected to address the vulnerabilities of communities to shocks, provide support responses to enterprises, provide good governance and financial measures in handling crises as well as capitalize on how the forestry sector can contribute to building sustainable and resilient societies (FAO 2020, ITTO 2020e). Based on this understanding, four recommendations are proffered:

- African governments should conduct detailed surveys on the social and economic impacts of COVID-19 on timber companies in each country and identify the difficulties of implementing sanitary and relief measures related to the pandemic. This will help generate ideas for dialogue on how best to assist in the recovery of jobs, production and exports.
- African governments should collaborate with the private sector to develop a safe forestry working guidance and plan to ensure business restart, continuity and resilience.
- African governments and private sector businesses should recognize the need for international market diversification to reduce dependence on one specific market such as China for trade in forest products.

African governments and private sector operators should recognize and invest in modernizing secondary and tertiary wood processing capacities for greater value-added products to meet national and regional demands. With finished wood products, intra-regional trade could be promoted through African Continental Free Trade Agreement.

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