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## Living by the Rhythm of Pan African Paper Mills The Rise and Decline of Webuye Town, Western Kenya

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### Introduction

This article is about the rise and fall of Pan African Paper Mills, the paper factory that was central to the rapid development of Webuye town in the 1970s as well as to its decline in the 2010s. Since the establishment of this giant factory in 1972, the development of Webuye was so rapid that it could not be compared to any other small towns in Western Kenya. It created employment opportunities for Kenyan workers who flocked the town in search for jobs. Webuye then transformed from a frontier town into an industrial town, displaying many signs of prosperity. Yet, in the 1990s, the Structural Adjustments Programmes resulted in collapse of Pan African Paper Mills in 2009. This was the genesis of unceasing urban challenges that almost brought the town down on its knees. The vandalized and rusting machines at the mills now resemble a ruined monument that is a stark reminder of the better past which may never return. If local memories display rosy depictions of Webuye's industrial past, the factory had a dramatically negative impact on the environment and on people's health, which it tried to mitigate through afforestation programmes. In 2016, the national government privatized Pan African Paper Mills as a way of reviving the factory. The private Rai Group inherited the factory and is now investing massively to rehabilitate the factory.

## 1. Industrial growth in postcolonial Webuye

In his work on Kenya's industrial progress in the post-independence era, Ogonda posits that the foundation of Kenya's industrialization was laid during colonial times and could be attested by the establishment of a number of industries processing both agricultural and non-agricultural commodities. After independence, substantial progress in industrial development was achieved. This period witnessed the setting up of manufacturing establishments of different types and sizes that had achieved a high level of self-sufficiency in the production of local consumer goods and introduced some of Kenya's industrial products to the international export market (Ogonda 1992) In the case of Webuye, Akongo a 60 year-old businessman, remembered that, due to the availability of timber in Western Kenya, the town developed a strong industrial base much needed for the development of this part of Western Kenya.<sup>1</sup>

### Pan African Paper Mills

Pan African Paper Mills (shortened as 'Pan Paper' in the rest of the article) was the first manufacturing plant to be established in Webuye Town. It created employment opportunities for both skilled and unskilled Kenyan workers who flocked the town in search of jobs. The factory did not only create employment but also led to an increase in population.<sup>2</sup> Soon after independence, Pan Paper became one of the first substantial industrial projects mooted to make the new Kenyan nation self-reliant in paper. More than a quarter of a century after its inception, the factory helped to achieve a considerable degree in the economic growth of the town and also provided new job opportunities and specialized skills and training to many hundreds of Kenyans. At its construction in 1972, Pan Paper was the biggest industrial complex in Kenya and the largest paper factory in Eastern and Central Africa.<sup>3</sup>

Pan Paper traces its origin in 1964 after feasibility studies concluded that the factory could be constructed. Pan African Paper Mills (E.A) Ltd was formed in 1970 by the Kenya Government with the Orient Paper Mills of India and the International Finance Corporation of the World Bank as co-sponsors. Considerable investments from these two sponsors not only supported Pan Paper's establishment, but also its subsequent expansion plans. On the front of the Technical Cooperation among Developing Countries (TCDC), expertise and enterprise from India contributed to the success of Pan Paper with manpower and natural resources from Kenya.<sup>4</sup>

The foundation stone for the mills at Broderick Falls (former Webuye) was laid by President Jomo Kenyatta in November 1972. Following the signing of the agreements, the

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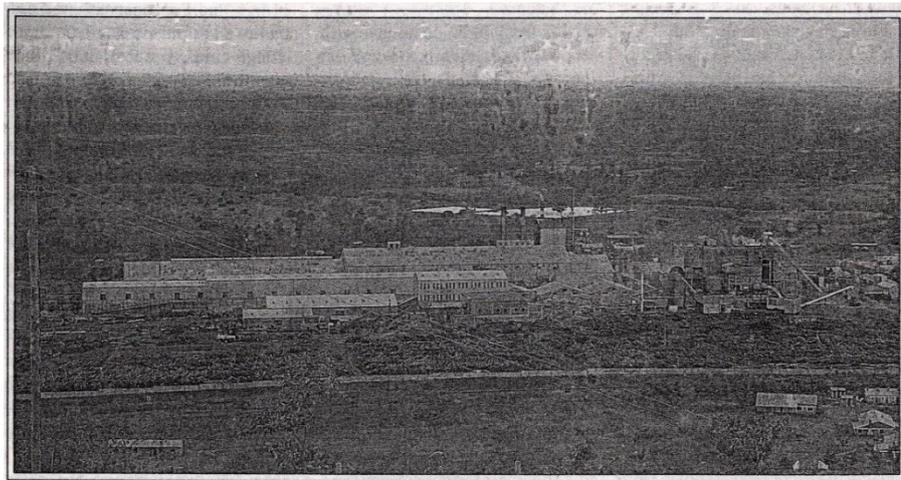
1 Oral Interview, Akongo, 60 years old, 30 November 2019.

2 Oral Interview, Okang'a Alphonse, 66 years old, 4 December 2019.

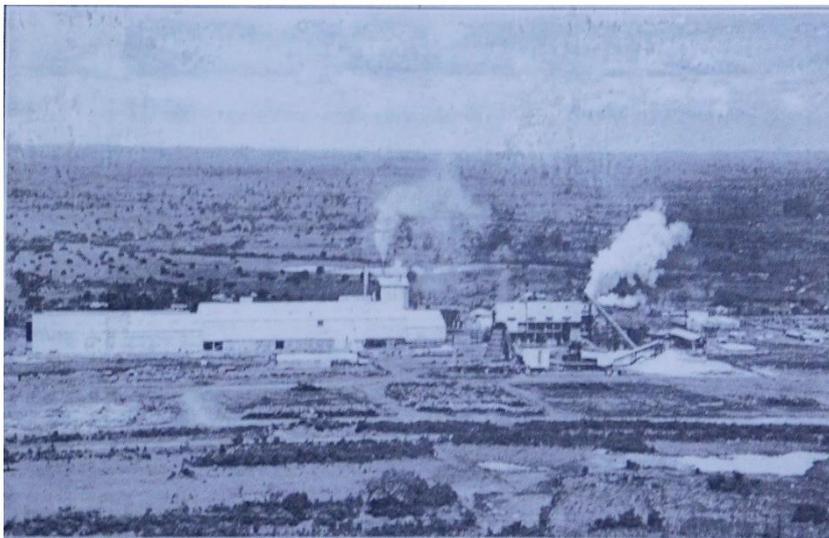
3 Pan Paper Mills' factsheet, "South-South Cooperation", p. 2.

4 KNA/KY/13/5/, Pan African Paper Mills (EA) Ltd, 1974.

construction of the mills commenced immediately.<sup>5</sup> At the time, the provision of such a large project in this part Western Kenya was expected to employ more than a thousand workers, transform the character of the town in a comparatively short space of time, increasing the population by perhaps five thousand persons or more within three years or so.<sup>6</sup> The then ex-senior chief Jonathan Barasa treated this development as the biggest gift ever given to the Bukusu sub-nation to thank them for their long struggle for independence at Chetambe Fort, where over four hundred Babukusu and a few Tachoni were killed by the imperialists while fighting to protect their land (Makila 1982: 2-3).



**Figure 1:** Aerial view of Pan African Paper Mills Complex after completion in 1973.  
*Source:* The Human Resource Manager's office Pan Paper Mills.



**Figure 2:** An aerial view of Pan African Paper Mills Complex at Webuye fully operating in 1974.  
*Source:* The Human Resource Manager's office Pan Paper Mills.

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5 KNA/KY/13/2, First Pulp at Paper Mills East Africa, 1970.

6 KNA/KY/13/2, Project for Paper Mills Limited, Broderick-Falls, 1970.

On November 1974, the commissioning of the mills at Webuye was already at its last stages of trial tests of pulp processing and paper making. The first MF Kraft paper produced from trees grown in the nearby Kaptagat forests was rolled on the machine on 27 November 1974. For the first time in the history of Kenya, paper which was entirely a Kenyan product was produced, considering that the main raw materials were entirely grown in Kenya.<sup>7</sup> The second machine producing bleached grades of paper was switched on in April 1975. Since then, various parts of the mills and the associated sections of the factory such as the cauterizing unit, the Lime Kiln and Power House among others were regularly adjusted prior to putting them into capacity trials. During those adjustment periods, good saleable paper of fairly high grade were produced, and even sold both locally and overseas. The standard rose regularly as the adjustment went on, and it was officially introduced into the market with a lot of confidence.<sup>8</sup>

By 1976, Pan Paper was up and running. Notably, unbleached Kraft paper as well as bleached grades of writing papers were being manufactured from plantation grown from pines as well as cypress and eucalyptus.<sup>9</sup> The initial installed annual capacity was 45,000 tonnes, but following two types of modernisation, this increased to 66,000 tonnes and was poised to reach 96,000 tonnes in the early 1991. An expansion plan was underway, which involved the installation of the third paper-making machine with a capacity of 30,000 tonnes per year.<sup>10</sup>

Since the mills started up, Pan Paper saved the country an estimated Shs 8.1 billion through import substitution and earned Shs 407 million in foreign exchange in paper exports. Since the establishment and efficient operations of pulp and paper industry required advanced and specialized technical skills, the government was keen to entrust these tasks to a suitable technical partner and selected the Birla Industries of India, through Orient Paper and Industries Ltd, to provide the necessary pre and post-operational services. Birla also provided 29 percent of the share capital.<sup>11</sup> The subsequent success of the company showed that the confidence reposed in the management made the project a profitable and an efficient joint venture.

## From a Frontier to a bustling town

In the 1960s, Webuye seemed like a frontier town. With only twenty-five scattered shops, a railway station, government offices and a health centre made up the then roadside stopover. For a population of only 800 people, the only important activity was the market day on Wednesday, which is always the market day in the town. After the establishment of Pan Paper, Webuye transformed into an industrial town and displayed many signs of prosperity. Over one hundred shops, two attractive hotels, two banks, five primary schools,

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7 KNA/KY/13/6, Commissioning of the Mills at Webuye, 1974.

8 KNA/KY/13/2/, Promotion of local manufactured paper: Government tender for papers, 1975.

9 KNA/KY/13/7, Paper Mills in action, 1976.

10 Pan Paper Mills' Factsheet, 1989, p. 12.

11 Pan Paper Mills' Factsheet, promotion of local manufactured paper, 1975, p. 5.

four secondary schools, a town hall, a social centre, two sports ground, tarmac roads, piped water, electricity and an airstrip for its population that had risen up to 30,000 people.<sup>12</sup> In other words, a rural area of 800 people became a boomtown of over 30,000 people, just two decades since the establishment of Pan Paper.

Pan Paper was not just a factory but a whole ‘complex’; which was opened in 1979 by President Daniel arap Moi. One informant who is a current employee at Rai Paper explained that Pan Paper had established a high school with a laboratory, workshop and qualified teachers. The company also had a well-equipped health clinic. To him, this was an example of a rural area becoming a boomtown in Kenya. On the social development front, the company’s recreational centre had contributed to the promotion of sports in Bungoma District, as Pan Paper sponsored tournaments and its teams participated in the national tournaments in football, chess and volleyball. A pioneer in family planning, Pan Paper provided a fully-equipped Family Planning (FP) centre at Webuye and free mobile clinics to provide child health care and family planning services.<sup>13</sup> It also helped in greening the town, through massive planting of trees.

The factory in its heydays provided employment for at least 3,000 local personnel, an additional 5,000 members of families settled in the Webuye town. The number included about 1,000 children of school-going age.<sup>14</sup> Mr. Kisuya, a chief of Maraka location observed that since then, the town’s population grew very fast. He further explained that the town’s economic growth became so rapid that very few small towns in Kenya could be compared to it in its growth rate.<sup>15</sup> This made Webuye to be the biggest town in Bungoma District. Residents of Webuye town saw Pan Paper as a source of good things to come. Indeed for several years, business did boom especially in bars and even restaurants.

Manufacturing of paper, especially of specialized paper and paper products, was generally considered a high-water mark in a nation’s march towards advanced techniques in industrial development. Madhupaper, a private paper-making company, was also one of the recognized symbols of this success story. When Madhupaper – with its different famous products such as “Rosy” toilet paper, “Royale” and facial tissues – started rolling out of its mills in Nairobi’s industrial area, Kenya was then wholly dependent on imported tissue and other papers derived from it. Thanks to Madhupaper, Kenya became almost totally self-sufficient in these products. Madhupaper was then a wholly Kenyan owned factory with no foreign participation. The only institutional shareholder was Pan Paper.<sup>16</sup> In other words, if it were not for Pan Paper, Madhupaper would not have been successful. This is a clear indication that the impact of Pan Paper was not only limited to Webuye town but to Kenya at large.

Both Pan Paper and Madhupaper placed Kenya on the East African map in terms of the production of paper. The two factories exported their products to countries like Uganda,

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12 Ibid., p. 6.

13 Oral Interview, Informant No. 3, 57 years old, 19 December 2019.

14 KNA/KY/13/9, Pan African Mills (E.A) Ltd, 1977.

15 Oral Interview, Mr. Kisuya, 50 years, 9 December 2019.

16 KNA, Weekly Review, Focus on Madhupaper, 23 June 1981, p. 23.

initially transported by train. Road transport later became the preferred mode of transport, when the market grew to include Tanzania, Rwanda, Burundi and South Sudan. Madhupaper's foreign exchange earnings from its products grew at an approximated rate of 15 percent per annum. However, the introduction of Structural Adjustment Programmes in Kenya brought more harm than good in the manufacturing sector, including the paper sector. Many industries no longer enjoyed the monopoly, hence the beginning of their decline.

## 2. Industrial decline

Due to a host of factors including mismanagement, Pan Paper started to struggle in 1992 with the introduction of SAPs and eventually collapsed in 2009. During this period the management contracted from India by the Indian-based Birla group, which had the largest shares, abandoned the factory as debts mounted. Ogange, a cobbler in Webuye town along Kenyatta Street, observed during an interview that Webuye was once bubbling with activities but became rife with poverty and hopelessness. The giant factory that stood like a pillar of life in the midst of the town collapsed, causing many of the town's homes to be deserted. The vandalized and rusting machines at the mills resemble a ruined monument that is a stark reminder of the better past which it seems may never return.<sup>17</sup> Ogange recalled the heydays of Pan Paper, when he relocated from Uganda to Webuye. He explained that life was so good that he could afford three meals in a day yet make savings as well. But since the collapse of Pan Paper, he says, life has never been any better and he is planning to return to his village.<sup>18</sup> His departure from Webuye would follow on the departures of many: "Other town residents who could no longer afford to put food on their table opted to go back to their respective villages including myself,"<sup>19</sup> explained another interviewee, Mayema, a former employee of Barclays Bank in Webuye branch who left the town and is currently staying at Bukhembe village.

Matasi, a retired architecture and a former employee at Webuye town hall, similarly described Webuye as a town that collapsed the moment Pan Paper collapsed. According to him, almost all economic activities in the town were pegged on the existence of Pan Paper, which explains why the town has become inactive, unable now to attract key investors.<sup>20</sup> He further observed that even the potential investors in the town, most of them Kenyan-Asians, are equally moving out of the town for other places. With the collapse of the factory, most of the businesses declined drastically.

Ezekiel, a contractor at Webuye Milk plant, also concurred with the argument that Webuye was almost at the brink of becoming a tale of the true ghost town that long lost its glory with the collapse of Pan Paper. Residents were left with only some tattered shreds of

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17 Oral Interview, Edward Ogange, 65 years old, 5 December 2019; <http://www.the-Star.co.ke> Accessed on 16 December 2019.

18 Oral Interview, Edward Ogange, 65 years old, 5 December 2019.

19 Oral Interview, Moses Mayema, 67 years old, 15 December 2019.

20 Oral Interview, Maurice Akongo, 60 years old, 30 November 2019.

hope that either the national government or the county government of Bungoma would bring the company back to life. Over 3,000 people lost their jobs, shopping centres that were beaming with life closed down, families broke, education was affected and the town curled its tail like an elephant, full of potential but slowly rotting from within.<sup>21</sup>



**Figure 3:** Photograph of Pan African Paper Mills that collapsed in 2009.

Source: Gerald Andae and Erick Ngobilo, 'Webuye Suffers Losses as Paper Mill Grinds to a Halt', *Business Daily*, 27 October 2010.

Okang'a, an engineer and former employee of Pan Paper, told emotionally that the collapse of the factory and its subsequent closure claimed the lives of some of his dearest friends. He explained how these friends died as a result of the trauma it caused. He further asserted that he only survived this pressure because he invested in small shops within the town. According to him, those who did not invest found it very hard to recover from the loss of their jobs which was why many succumbed to the pressure.<sup>22</sup>

Before the collapse, Webuye was literally living by the rhythm of Pan Paper. The smell of paper-making used to notify any stranger that Pan Paper was there. The mills were also keeping the town alive with unending sound. Oduol, a former employee of Pan Paper Mills who is now a tailor at Kenyatta Street, recalled when they depended on the alarm (*Kingora*) to signal the change of shift. Everyone in the street relied on the old factory *Kingora* to get the time right.<sup>23</sup> He also nostalgically recalls when the Pan Paper buses could come to pick and drop employees in the town.

Now, there is no sound and no smell, and servant quarters that used to glitter with whitewash as families moved up and down are rusty, dirty and some have been abandoned, occupied by monkeys and shrubs, with insects checking in with their shrieks every nightfall. Bars closed, hotels no longer cooked food as before. *Bodaboda* (motorbike) operators started to live on the hope that new passengers would come by (Mbogo 2009).

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21 Oral Interview, Ezekiel Nderitu, 48 years old, 21 December 2019.

22 Oral Interview, Alphonse Okang'a, 66 years old, 4 December 2019.

23 Oral Interview, Moses Oduol, 70 years old, 15 December 2019.

Even the evening ladies, who used to make their living, have nothing to fall back to. Walking past places like Half London, a mini shopping centre to Sango, plenty of traces of the past show abandoned restaurants, bars and lodges.<sup>24</sup> Oduol, the tailor, gave telling examples of the everyday signs of the town's decline, notably insisting that the market had shrunk and only outsiders now come to Webuye every Wednesday to sell their goods. When life was good in the 1990s, he said, he used to make up to Ksh 15,000 on a good month, but now as things are, he has to make do with between Ksh 1,000 to Ksh 2,000. There is no adequate money in circulation within the town.<sup>25</sup>

A fruit vendor at Sango Stage in Webuye, named Namachanja, explained that when the factory collapsed, the Pan Paper Clinic, the Anglican Church Primary School and Pan Paper Secondary also collapsed, as many families moved back to their home regions. At St. Mathews School for instance, since the collapse of Pan Paper, enrollment dropped from 800 to 500 students. Pan Paper Secondary was finally closed as students abandoned school due to unpaid fees. In 2009, the school had 880 students, the population reduced drastically, and subsequently the school was closed.<sup>26</sup> In other words, Pan Paper went down with almost all the services which people remember as good things to them.

## Pan Paper and the environment

In spite of these rosy depictions of Pan Paper, the factory had a dramatically negative impact on the environment and on people's health. At the time of the establishment of the mills, the Webuye area used to be a heavily forested region, and formed part of Kakamega indigenous forest. The Pan Paper mills' demand for wood turned the area barren and, in the early 2000s, the company trucks had to travel over one hundred miles for raw materials.<sup>27</sup> Moreover, a report from the *East Africa Standard* stated that local residents had accused the paper mill of having turned a vast area of the countryside into an environmental wasteland and of becoming an economic and social burden. Imbuye, a County government security officer residing at Webuye town, explained that Pan Paper was a terrible health hazard to many residents of the town. He further insisted that emissions from the factory damaged people's lungs, lowering their resistance to diseases like pneumonia.<sup>28</sup> Cases of skin ailments also increased. Okang'a recalls how the seepage from the sulphide ponds to the Nzoia River, which residents depended on for their water needs, was so severe that bathing in the river had become dangerous. Some animals drank the water and died as a result of the chemical produced during pulping. The area around the mill was enveloped in foul-smelling air. It could be smelled as far as 80 km away depending on the direction of the wind. Acidic fumes and fly ash were resulting in the corrosion of the corrugated iron roofs

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24 Oral Interview, Mr. Singh, 45 years old, 30 November 2019.

25 Oral Interview, Moses Oduol, 70 years old, 15 December 2019.

26 Oral Interview, Melany Namachanja, 55 years old, 29 November 2019.

27 Daniel, O., "Kenya is Exploring Alternative Sources of Energy", *The Standard*, March, 1999.

28 Oral Interview, Samuel Imbuye, 40 years old, 3 December 2019.

of houses in the vicinity of the mills. In addition, the mills' solid waste which was dumped on fields as manure had led to the decline in local agricultural production.<sup>29</sup>

Okang'a further recalled that, from 1987, Pan Paper embarked upon a major afforestation programme to replenish the natural resources and enhance environment as well as to gain back the trust of the area residents.<sup>30</sup> It actively supported the government's afforestation and forest renewal programmes, and ensured that clear-felled areas were more than adequately replenished. With tree nurseries in Webuye, Kapatagat and Ainabkoi, Pan Paper raised over one million trees in 1989 and these nurseries were producing millions of trees annually. The tree planting exercise started in 1987 with 50,000 trees, a figure which rose to 800, 000 trees by 1988.<sup>31</sup>

The Webuye, Kaptagat and Ainabkoi nurseries had become the nucleus of Pan Paper's afforestation programme. At the beginning of 1989, over 13,000 ha had been planted in the pulpwood circle, west of Nakuru, which was reserved as a raw material source for pulp and paper industry. In conjunction with the Forest Department, Pan Paper was replanting in the Uasin Gishu and Turbo pulp wood areas. Pan Paper was planting two trees for every one cut for pulping. It was also replanting indigenous trees in the denuded catchment areas of Kaptagat and envisaged a major role in achieving the national objectives of sustainable management of forest resources.<sup>32</sup> Thus Pan Paper played a key role in greening Kenya at an increasing rate.

Finally, as a strategy to recover from the collapse of Pan Paper, the County government of Bungoma decided to invest in other areas like education and in the construction of small industries, like the Milk plant. However, the plans to construct an industrial park in the town were thwarted because of a lack of land. Above all, the national government privatized Pan African Paper Mills in 2016 as a way of reviving the factory. The Rai Group inherited the factory in such a dilapidated state that in the eyes of many it was beyond repair. However, the new owner decided to pump in a huge amount of money to rehabilitate the plant. Some of the old staff have since been recalled and, with some expatriates, they have been rebuilding the plant. Though the process has been quite slow due to the scarcity of resources and machines, the management is working with speed in repairs and re-installations to ensure that the other three machines are revamped and are up and running.

## Conclusion

Webuye town developed rapidly between 1964 and 1991 due to the establishment of industries in the town. Pan African Paper Mills created employment opportunities to thousands of the town residents. It also provided education and health services and prompted a bustling private sector activity. However, the collapse of Pan Paper in 2009 and its subsequent closure greatly affected this rapid urban growth. Many businesses closed

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29 Pan African Paper Mills spread sickness, <https://www.ogiek.org>.

30 Oral Interview, Alphonse Okang'a, 66 years old, 4 December 2019.

31 Pan Paper Mills' Factsheet, "Two trees for one", 1991, p. 11.

32 Ibid.

because money could not flow anymore alongside the many services which the factory had brought to Webuye dwellers. The town was on its way to becoming a true tale of a ghost town. The current revival of Pan Paper has been received with mixed reactions. To a section of the town's residents, the factory which is currently standing like a ruined monument in the town reminds them of the glorious past and can only hope for the time when the factory will be fully revived. To the other section, the ruins of Pan Paper remind them of a monster that claimed a lot of lives through its environmental pollution, the stress and deaths which came forth as a result of its closure. Pan Paper only reminds them of the agony and misery they went through.

## Bibliography

- Andersen, H.S., 2003. *Urban Sores: On the Interaction Between Segregation, Urban Decay and Deprived Neighbourhoods*. London: Routledge.
- Anderson, D. and R. Rathbone, 2000. "Introduction", in D. Anderson and R. Rathbone (ed.), *Africa's Urban Past*. Oxford: James Currey Ltd.
- Beauregard, A., 1993. *Voices of Decline. The Postwar Fate of US Cities*. Cambridge: Blackwell Publisher.
- Aseka, E.M., 1993; "Urbanisation", in W.R. Ochieng (ed), *Themes in Kenyan History*. Nairobi: East African Educational Publishers Ltd.
- Berg, F. J., 1973. "The Coast from the Portuguese Invasion to the Rise of Zanzibar Sultanate", in B. A. Ogot (ed.), *Zamani: A Survey of East African History*. Nairobi: East African Literature Bureau.
- Brett, E.A, 1973. *Colonialism and Under-Development in East Africa*, London: Heinemann.
- Burgman, H., 1979. *The Early History of Mumias Mission*. Kisumu: National Printing Press.
- Button, J., 1970. "Urban Challenge in East Africa" in J. Gunder (ed), *Urbanisation in East Africa*. Nairobi: East African Publishing House.
- Chirwa, E. W., 2000. "Structural Adjustment Programmes and Technical Efficiency in the Malawian Manufacturing Sector." *African Development Review* 12, no. 1: 89-113
- Claak, D., 1982. *Urban Geography*. Maryland: The John Hopkins University Press.
- Cooper, F., 1983. "Urban Space, Industrial Time and Wage Labour in Africa", in F. Cooper, (ed.), *The Struggle for the City: Migrant Labour, Capital and the State in Urban Africa*. London: Sage Publications.
- Davis, R.O., 1998. *Decline of small towns America*. Ohio: Ohio University Press.
- Harbison, F., and C. A. Myers, 1964. *Education, manpower and Economic Growth*, New York: McGraw-Hill.
- Lawrence, P. R and J. W. Lorsch, 1967. *Administrative Science Quarterly* 12, no. 1 (June): 1-47.
- Mah, A., 2012. *Industrial Ruination, Community and Place; Landscape and Legacies of Urban Decline*. Toronto: University of Toronto Press.
- Makila, F. E., 1982. *The Significance of Chetambe Fort in Bukusu History*. Department of Culture, Official Monograph, University of Nairobi: 2-3.
- Mbogo, S., 2009. "Webuye pays a heavy price for the collapse of paper millers", *The Daily Nation* "Business Daily", p. 13, October 19.
- Ogonda, R.T., 1992. "Kenya's Industrial Progress in the Post-independence Era: An overview of Kenya's industrial performance up to 1980", in W.R. Ochieng and R.M.

Maxon (eds.), *An Economic History of Kenya: 297–302*. Nairobi Kenya: East African Educational Publishers Ltd.

Rostow, W.W., 1990. *The Stages of Economic Growth: A Non-Communist Manifesto*, London: Cambridge University Press.

Wong, R. H., 2006. “The Urban Functions of Educational Institutions” in J. A. Lauways and D. G. Scanlon (ed.), *Education in Cities*. London: Routledge.