REORGANIZING THE DISTRIBUTION SYSTEM IN POST-CONFLICT SOCIETY: A STUDY ON ORIENTALE PROVINCE, THE DEMOCRATIC REPUBLIC OF THE CONGO

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ABSTRACT In the Democratic Republic of the Congo, conflicts have devastated the distribution infrastructure such as roads and bridges, which has stymied the rural economy. The current state of urban-rural distribution processes must be determined to rehabilitate local communities. However, the perspective of such determinations is unclear. This article, therefore, describes and analyzes conflict impacts on urban-rural distribution, periodic market functioning, and indigenous distributional activities based on qualitative and GPS data collected from an extensive area survey. Observing 500 km of main roadways from rural villages to the capital of Orientale Province by motorbike, I present a study of urban-rural distribution. Today, a mass of rural residents travel to periodic markets through forests and engage in long-distance peddling to connect with the urban economy while petty traders advance their commercial activities. Using waterborne transportation, such as dugout canoes, traders sustain urban-rural commodity interexchange. The collapse of the pre-conflict distribution system has caused the periodic markets to become influential regional economic nodes. These observations indicate that local people reorganize alternative distribution systems utilizing indigenous knowledge and ecological environments.

Key Words: Post-conflict society; Distribution system; Indigenous development; Periodic market; Democratic Republic of the Congo.

INTRODUCTION

Repeated conflicts have plagued the Democratic Republic of the Congo (DRC). The Second Congo War in 1998, which occurred at the end of the Mobutu regime, included 19 countries and caused the deaths of 5.4 million people. Although the conflict ended in 2003 with the Lusaka Ceasefire Agreement, a state of war persists along the eastern national border of Orientale Province. Antigovernment forces periodically raid local villages and exploit mineral resources in an extensive area, and these events are frequently broadcasted all over the world.

Hidden behind the spectacle of war, residents of the central and western DRC attempt to rehabilitate their living conditions. The Second Congo War destroyed social infrastructure such as electrical plants, hospitals, and roads while regional inhabitants spontaneously attempted social and economic recovery from conflict.

Since the 1970s, a research group from Kyoto University has continued primate and ecological anthropological research in Wamba region, in the central part of the DRC (Sato, 1983; Takeda, 1990; Kano, 1992; Kimura, 1992). Although researchers were forced to abort their projects from the late 1990s to the early 2000s, they have since resumed their studies (Furuichi & Mwanza, 2003). The

researchers' observations show that local residents changed their subsistence strategies abruptly, which was a result of the collapse of the distribution system (Kimura et al., 2012). While this prior study revealed local people's adaptation to a post-conflict situation, little research has been done to explore specific livelihood and distribution processes since the conflict. Thus, the current state of urban-rural distribution remains unclear.

This study, therefore, first focuses on current distribution channels. I conducted an extensive area study from the Wamba region to Kisangani, the capital city of Orientale Province. Tracking principal roads, that is, almost 500 km by motorbike, I determined the current state of urban-rural distribution.

During this extensive research, Yamfira, a local market located approximately 120 km to the east of Kisangani, reflected robust commercial activity with a mass of people gathering to purchase and sell goods. According to the administrative officer, this market expanded rapidly after the war. Therefore, the second purpose of this paper is to illustrate the function of periodic markets along the Congo River and its branches, including Yamfira.

This article describes the impact of the war on the local economy and analyzes the factors that have sustained urban-rural distribution since the conflict. Although this paper is limited to a brief research period, it depicts urban-rural distribution, which has been hidden for some time.

RESEARCH AREA AND METHOD

The Research Area

This research focuses on the economic region around Kisangani, Orientale Province, a region in demand, and a focus of conflict during the Second Congo War. This province is located in the northeastern part of the Democratic Republic of the Congo (Fig. 1). The region has achieved outstanding agricultural production. Expatriate company-owned plantations have produced various crops such as coffee, palm oil, rubber, and rice. In 1950, the region accounted for 66% of the nation's agricultural exports in conjunction with Equateur Province (Bezy et al., 1981). Historically, agriculture has been emphasized in Orientale Province.

Kisangani, the capital of Orientale Province, was called the "third pole of development" in the national economy before the war (Russell, 1991). Kisangani is now an influential trading center of agricultural products and imported merchandise. Kisangani mediates actively between hinterland and neighboring Uganda. Distribution channels are roughly divided into two, land and waterborne transportation. Imported merchandise from Uganda is transported along paved roads. Agricultural products in rural areas are distributed to Kisangani through river trade. Kisangani takes advantage of both means of transportation; hence, the capital's bustling commercial activity.

Some parts of Equateur Province, such as Wamba, are connected economically with Kisangani. The collapse of trucking and shipping logistics during the war sustained economic ties between Kinshasa, Mbandaka, and rural villages. According

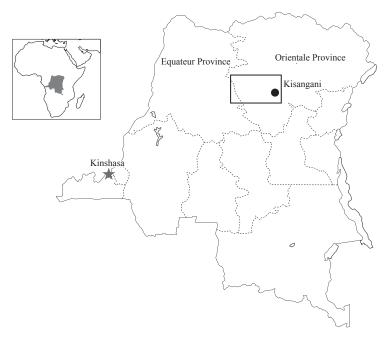


Fig. 1. Research area.

to Kimura et al., (2012), the distributional paralysis stimulated subsistence change in this area. Unlike the pre-conflict era, inhabitants of Wamba ceased coffee cultivation as a cash crop because of the lack of outlets. Today rural residents head east to obtain cash income and imported merchandise.

Method

I collected field data from July–September 2013 and from August–September 2014. This research depicts current urban-rural distribution in two parts. First, in 2013, I obtained information concerning rural-urban distribution conducting extensive field research for a total of 24 days. Observing principal roads, 491 km in total from Wamba region, Tshuapa District in Equateur Province, to Kisangani. I surveyed the movements of local commodities such as bush meat, palm oil, and rice traveling by motorbike and equipped with a GPS. While traveling, I recorded the actual state of road infrastructure, the locations, and the status of periodic markets. Second, in 2014, I conducted participatory research to illustrate the commercial activities of petty traders who mainly distribute imported merchandise in the Tshopo District, Orientale Province. I was accompanied by a merchant who sold imported merchandise for a total of 34 days, and we collected data on the movement of imported commodities. Additionally, I conducted interviews with rural residents, petty traders, and administrative officers to investigate the sudden changes that occurred before and after the conflict.

RESULTS

The Collapse of the Distribution System

Expatriate company withdrawal

The withdrawal of expatriate companies had a significant impact on the local distribution system. From an interview with the administrative officer in Isangi District, I learned that, in 1960, there were 14 foreign companies in the area, such as the Belgian palm oil plantations Busira Lomami, Transco, and Bosolo. Before the conflict, expatriate companies owned and managed permanent stores that supplied industrial commodities. Expatriate companies also maintained roads and bridges to facilitate the purchase and transportation of agricultural products from the peripheral rural villages. These companies sent truck fleets to collect cargo and then shipped the cargo to consumption areas such as Kinshasa and Kisangani along the Congo River. Expatriate companies were responsible for inland distribution. This situation also applied to the Equateur Province. According to rural residents in Wamba, before the war, expatriate companies such as Burex and Nouvelle Oasis sent trucks to collect cargo and transport it to Kinshasa on large vessels.

These colonial practices sustained the rural distribution system for a long period. However, 13 out of 14 expatriate companies within Isangi District were forced by the conflict to cease operations. Although the last company, Busira Lomami still manages a palm oil plantation, other businesses such as coffee and cacao shut down. Permanent stores distributing imported merchandise also closed. This withdrawal and degradation of foreign companies caused the deterioration of road transportation. Along with the colonial setting, land infrastructure began to corrode. Roads, truck fleets, and large vessels that foreign companies supplied, were lost in the chaos of conflict.

The current state of the distribution system within the research area

Fig. 2 shows the current state of the roads within the research area that I traveled through. Observing the principle road from Wamba to Kisangani, 491 km in total, 34 bridges had collapsed. While 174 km from Kisangani is traversable by vehicle, truck trading is impossible in inland rural villages. Unlike the colonial era, local people must build bridges themselves to ensure mobility. Because of the lack of capital and construction techniques, bridges are coarsely assembled with several logs (Fig. 3). Although local people and motorbikes can traverse the long distance to Kisangani, truck drivers cannot enter the inland rural area to purchase agricultural products.

This interruption of truck brokerage causes economic stagnation and commodity scarcity in rural areas. Today, rural residents, such as the inhabitants of Wamba, cannot sell agricultural products in their village. Moreover, access to imported merchandise is considerably restricted. To compensate for the lack of income and commodities, local people organize alternative distribution systems, that is, periodic markets. Urban-rural distribution is again recovering because of the ceaseless efforts of local residents and indigenous techniques. Current urban-rural distribution is described in detail in the following sections.

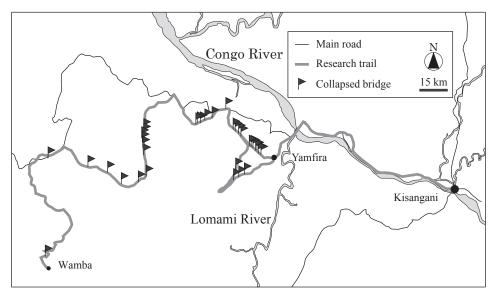


Fig. 2. The Current state of distribution infrastructure.



Fig. 3. Collapsed bridge.

Forest Path: Long-distance Peddling by Local Residents

Local residents have adapted themselves to the interruption in truck trading. Thus, the people are organizing alternative distribution systems to replace the lost expatriate systems. To connect with the urban economy, rural people engage in long-distance peddling. For example, the inhabitants of Wamba region organize walking trips to sell local commodities such as bush meat, dried fish, and distilled liquor. Their main destination is Yamfira, a famous periodic market along the Lomami River. A one-way walking trip takes two weeks and involves intensive



Fig. 4. Walking through the forest.



Fig. 5. Path to Yamfira.

hard labor. To conserve energy, the walkers take a shortcut through a tropical rainforest (Fig. 4). However, the shortcut through the rainforest is over 200 km. Trekkers carry 30 to 40 kg burdens on their shoulders (Fig. 5). Local residents create their own marketing networks, which connect their villages and periodic markets (Fig. 6).

Why do Wamba people conduct this labor-intensive, long-distance peddling? There are two reasons. First, periodic markets along the river supply rural residents with outlets for local products. Second, the river trade allows lower-priced imported merchandise. Wamba people sell local products to brokers who gather at the periodic market, which provides the Wamba inhabitants with cash income. The brokers then ship local products to Kisangani by dugout canoe and liner. This transaction between local residents and brokers has connected urban-rural distribution since the war. Through long-distance peddling, local people are subsisting in a post-conflict situation. Fig. 7 shows the change in prices from Kisangani to Wamba. The distribution cost accumulated in inland periodic markets causes a three

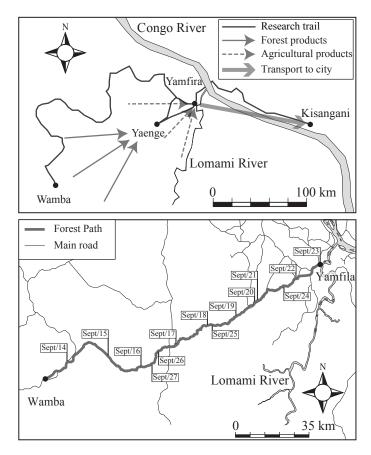


Fig. 6. Rural-urban commodity movement in the model and in the actual path. An informant living in Wamba region was asked to trace the "forest path" to Yamfira with a GPS to create the lower figure. The dates of the journey are also presented.

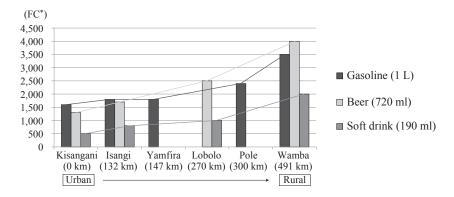


Fig. 7. The Change in commodity prices from Kisangani to Wamba. *Franc Congolais (FC), the currency of the DRC; one US dollar is equal to 900 FC.

or fourfold increase in the Kisangani merchandise in Wamba. Today, riverside markets attract large numbers of local residents and create a bustling center of commercial activity.

River Path: Expansion of Periodic Markets

Rural residents carry local products along a path through the forest. Traders sustain the commodity interexchange between periodic markets and the city. Because of the collapse of expatriate distribution, a mass of people attend the periodic markets. The scale and function of periodic markets are rapidly expanding. One example is Yamfira, the biggest periodic market within the research area. According to the administrative market officer, this market has drastically expanded in the last 10 years. Local residents' estimate that Yamfira has developed into a market three times larger than the pre-conflict market.

Periodic markets

According to the extensive area survey, periodic markets are shown in Fig. 8. I was unable to visit all of the periodic markets because of the brief duration of the research; however, I surveyed the main riverside markets that link to Kisangani in the specified region. The merchants are composed mainly of members of the ethnic group, Lokele, who inhabit both banks of the Congo River. Traditionally, the merchants have performed interethnic exchange between the forest and river. However, the indigenous markets were surbordinate to the expatriate distribution system (Russell, 1991). After the conflict, masses of people gathered at the

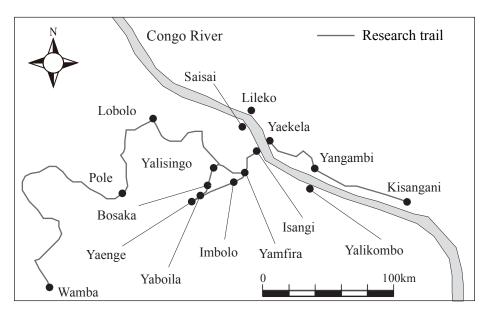


Fig. 8. Distribution pattern of periodic markets.

Market name	Market day	Number of stall	Areasquare (m ²)	Characteristics
Yamfira	Wednesday	387	15,128	riverside
Yangambi	Sunday	337	6,569	riverside
Isangi	Thursday	202	7,188	riverside
Lileko	Saturday	200	5,670	riverside
Saisai	Friday	115	3,213	riverside
Yaekela	Monday	93	4,125	riverside
Imbolo	Saturday	63	2,720	riverside
Yaenge	Sunday	40	749	inland
Yaboila	Sunday	36	902	inland

Table 1. Status of periodic markets

markets. On market day, peripheral local residents and traders visit traveling by foot, bicycle, and dugout canoe. The traders display imported merchandise at their stalls. Similarly, rural residents sell local products. Today, periodic markets promote urban-rural commodity exchange, that is, agricultural products, industrial material, and other services.

The markets are categorized as riverside or inland markets. Table 1 show that riverside markets tend to hold more stalls than roadside markets. From direct observation, the scale of periodic markets varies depending on the available transportation. Riverside markets benefit from the mass transportation of the dugout canoes, which enables petty traders to supply various commodities compared to roadside markets (Fig. 9). In contrast, commodity handling by roadside markets is considerably limited (Fig. 10). Petty traders cannot load heavy commodities such as TVs, MP3 players, roofing materials, and metal cookware. Using motorbikes and bicycles, they can supply daily necessities only such as pens, soap, salt, and sardines. The riverside markets benefit from the mass river transportation and distribution channel called "river path" in contrast to "forest path."







Fig. 10. Inland market: Yaboila.

Traders

From direct observation of five riverside periodic markets, at least 200–700 people engage in commercial activities. At first glance, the market scenery seems complex because of merchant volume, various commodity handling, and a bustling atmosphere. I categorized these merchants into two groups for the survey—brokers and traveling merchants.

Brokers

Brokers collect local products in periodic markets and ship them to Kisangani. The brokers set up stalls or simply sit near the market entrance or port and purchase local products such as palm oil, rice, bush meat, and dried fish (Fig. 11). During the day, the brokers continue to purchase local products, which are brought by rural people. These rural products are loaded into dugout canoes and liners and transported to Kisangani (Fig. 12). Using waterborne transportation, brokers regularly conduct roundtrips between periodic markets and Kisangani.

Brokers have their own specialization. The means of transportation varies depending on the items they are handling. Brokers who specialize in bush meat and dried fish use liners because these products are light and relatively bulk free. Liners link Yamfira with Kisangani, 126 km upstream, in one day.

Brokers handling agricultural products, such as palm oil and rice, use dugout canoes for transportation. It is possible to load large canoes with abundant inland products. An interview with one palm oil broker revealed that one dugout canoe can transport eight tons of product in one trip. It takes four days to transport agricultural product from Yamfira to Kisangani. Using this waterborne transportation, long distance, mass transportation networks have been created to serve urban-rural relationships.



Fig. 11. Palm oil brokerage.



Fig. 12. Shipping by canoe.

Traveling merchants

Traveling merchants mainly trade imported commodities. They deliver goods from Kisangani or Butembo, a city near the border of Uganda. The informant who I accompanied purchased merchandise twice a month in Kinsangani. Traveling merchants ship goods in stock from Kisangani to periodic markets by liner. The merchants typically open their stalls at 7:00 and finish between 15:00 and 16:00. After closing their stalls, the merchants pack the commodities in metal boxes, loading the commodities into dugout canoes, and continue to the next periodic market. Almost every night is spent at the stall in the markets to protect their merchandise.

Within the research area, traveling merchants circulate neighboring periodic markets to compensate for the lack of rural demand. Semi-structured interviews showed that traveling merchants engage in selling commodities at four or five markets per week. Fig. 13 shows the merchants' movements in this region and the routes of the regulate liners that link Yamfira with Kisangani.

Rivers facilitate the distribution by traveling merchants of imported commodities over an extensive area. Most traveling merchants who work at riverside markets use dugout canoes to transport their commodities. The merchants can carry substantial amounts of commodities to several markets by dugout canoe. Additionally, the liners supply imported merchandise stocks for the merchants. The liner traverses between Yamfira and Kisangani, providing a stable commodity supply, and the imported commodities are supplied to periodic markets. Inhabitants inland gain access to various imported items. Although the conflict destroyed the land infrastructure and the distribution channels such as trucks, petty traders are attempting to reconstruct an alternative distribution system by substituting river trade for land transportation.

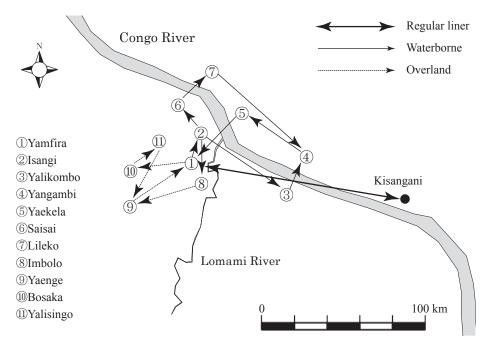


Fig. 13. Market network within the research area.

Reorganizing the distribution system using the periodic markets

The periodic markets have become essential economic nodes in this region since the end of the expatriate distribution. Particularly, I observed active commercial activities in riverside markets where merchants conduct waterborne mass transportation using dugout canoe. On first inspection, riverside markets appeared similar; however, functional differences exist.

Table 2 shows the number of rural residents and petty traders, their commodities, and merchant specialization. This data shows that Yamfira has strong brokerage capacity. A total of 22 brokers gathered at Yamfira and engaged in the transportation of local products to Kisangani by dugout canoe. Moreover, one professional broker installed a gasoline engine rice mill, which was not seen in the

Table	2	Riverside	market	demographics
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	Rural resident						Tuorralino
Market name	Vegetables	Grains	Bush meat, dried fish	Domestic animals	Processed foods	Broker	Traveling merchant
Yamfira	70	26	64	1	137	22	394
Isangi	172	64	76	0	122	2	252
Lileko	31	30	65	0	112	4	186
Yaekela	83	20	18	1	95	5	124
Saisai	28	11	59	1	47	1	67

other markets. Before the conflict, expatriate companies conducted the sequential process of pickup, processing, and export of agricultural products. Yamfira partly compensates for this process. While normal riverside and inland markets supply only imported merchandise, Yamfira supplies abundant brokerage opportunities. Yamfira is situated higher up in the riverside market hierarchy.

Today, a mass of local residents visit Yamfira because the market supplies the distribution channel to Kisangani and the imported merchandise. In spite of the labor-intensive journey, rural residents conduct long-distance peddling to connect with the urban economy. Yamfira's expansion and rural residents' long-distance peddling reflect the changes in the distribution system in this region. These movements are considered endogenous distributional reorganization centered around Yamfira by rural residents and petty traders.

My observations show that local people and petty traders have reorganized and created an alternative distribution system. Periodic markets have become essential focal points of the distribution system since the war. Sustained by the walking peddlers and waterborne transportation, periodic markets are expanding post-conflict.

DISCUSSION

Forest Path Meets River Path: The Current State of Urban-Rural Distribution

I have summarized the post-war distribution system in a model (Fig. 14). Today, periodic markets mediate urban-rural distribution. Distribution networks and commercial activities are expanding. Although the war separated urban-rural economic ties, local people are connecting to the urban-rural interexchange by utilizing "forest path" and "river path." Local residents and petty traders exhibit

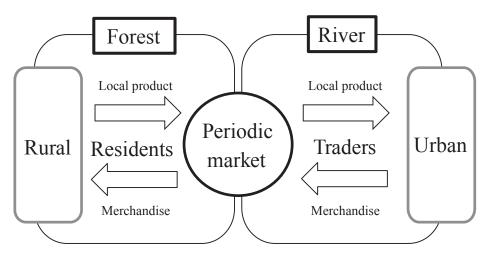


Fig. 14. Model of urban-rural distribution post-conflict.

autonomy in reconstructing deteriorated social foundations. Although distribution by periodic markets may be inefficient because the system relies on manpower, the system is self-sustaining. Without expatriate companies and government support, local people have devised an alternative distribution system, which provides abundant impetus to local development.

Indigenous Development by the Petty Traders

The gradual recovery of urban-rural distribution stimulates rural residents into forming local associations, which promotes field cultivation and road and bridge repair (Matsuura, in this volume). Additionally, merchants have begun to accumulate wealth in the post-conflict condition. Russell (1991) noted that merchants were unable to plan and exhibit productive investment because of the uncertain social situation; however, today, some traders accumulate wealth and possess accurate development plans. MacGaffey (1987; 1991) suggested that traders possess fundamental initiatives that can reconstruct society. Some traders installed a rice mill, purchased vehicles, and established hotels in the region, which promoted individual motivation. The evidence of such motivation nurtured in a post-conflict condition in periodic markets deserves further research.

Potential of Periodic Markets in the Post-war Period

Unlike the pre-conflict era, today, a mass of local residents who have an alternative subsistence gather and communicate in periodic markets. Commercial ethnic groups who conduct roundtrips between periodic markets and Kisangani bring imported merchandise and, at the same time, urban mode. In exchange, rural residents receive material products and an urban mindset. Through face-to-face interaction, information is shared between urban and rural inhabitants. The present distribution system is labor intensive. However, this process contributes to the construction of local integrity. To rehabilitate post-conflict society, particularly in a state that lacks effective governmental functions, these elusive impacts should be noted. This case study illustrates the possibilities for local communities if people unite in mutual cooperation beyond personal interest

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