

## THE MERAUKE–SINGAPORE CROCODILE SKIN TRADE NETWORK DURING THE DUTCH COLONIAL PERIOD

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### ABSTRACT

This article examines the crocodile skin trade network that operated between Merauke the southernmost district of Dutch New Guinea (Nederlands Nieuw-Guinea) and Singapore as the principal entrepôt port of Southeast Asia during the Dutch colonial period, approximately from the early twentieth century until the territory's transfer to the United Nations in 1962. Drawing on Dutch colonial archives, marine biology reports, and international literature on the exotic skin trade, this article argues that the commodification of crocodile hides in Merauke constituted part of a broader system of natural resource exploitation linking colonial peripheries in Papua to European luxury markets via Singapore as a redistributive node. The Dutch trading company IMEX (Import en Export Maatschappij) emerged as a key actor integrating local hunters of the Marindanim and Asmat peoples into global commodity chains. The article further demonstrates that large-scale unregulated hunting imposed serious ecological pressure on saltwater crocodile (*Crocodylus porosus*) populations in the region, planting the seeds of conservation discourse that emerged at the twilight of the colonial era.)

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### INTRODUCTION

A handbag displayed in the display window of a luxury boutique in Paris or Amsterdam during the 1950s, appearing to be little more than an object of elegance, in fact conceals traces of a lengthy journey that began in the

sago-fringed swamps at the mouth of the Digul River in Merauke. It was there, far from the glare of the metropolises' city lights, that hunters from the Marind-anim or Asmat tribes traversed muddy channels beneath the scorching Papuan sun to snare saltwater crocodiles (*Crocodylus porosus*). The resultant hides would subsequently travel thousands of kilometers from the port of Merauke, transiting through Singapore before ultimately reaching the hands of artisans and merchants in Europe (Ken, 1978b).

The trade in crocodile skins from the southern region of Netherlands New Guinea to Singapore constitutes one of the most compelling yet least researched episodes in the economic history of the Dutch East Indies colonial era. Unlike the spices of Maluku, the rubber of Sumatra, or the petroleum of Kalimantan all of which have attracted relatively extensive historiographical attention the trade in "forest" and "swamp" commodities originating from Papua has remained underexplored territory among historians (Jelden, 1980). Yet, as this article will demonstrate, reptile skins, particularly crocodile hides, served as a staple export from Merauke for several decades in the early twentieth century. Furthermore, the trading networks involved reflect broader dynamics of colonial power, peripheral capitalism, and the tensions between exploitation and conservation—issues that hold considerable relevance for contemporary analysis.

This article aims to reconstruct the Merauke–Singapore crocodile skin trade network during the Dutch colonial period, specifically from the establishment of the Dutch administrative post in Merauke in 1902 to the conclusion of Dutch rule in West New Guinea in 1962 (Ken, 1978a). The study focuses on three principal research questions: first, how the system of collection and distribution of crocodile skins operated on the ground, from the hunting practices of indigenous communities to shipment from the export port; second, what role Singapore played as an entrepôt port within the broader network of exotic hide trade from the Dutch East Indies; and third, what ecological and socio-cultural repercussions the commodification of crocodiles engendered for Papuan societies and the local fauna.

The approach adopted in this article integrates economic history, environmental history, and colonial history. The primary sources utilized include Dutch colonial archives held at the Nationaal Archief in The Hague, particularly reports from administrative officials in Nieuw-Guinea; reports from the Import en Export Maatschappij (IMEX), as cited in Schoorl (Schoorl, 2001); publications from the Crocodile Specialist Group (CSG) of the IUCN; and secondary literature from various scholars of Dutch-Papuan colonial history and Singaporean trade history, including the works of Piet Schoorl, R.C. Bone, Joel S. Kahn, and Gerrit Knapp.

## METODE PENELITIAN

This study employed a qualitative approach using a library research method. The objects of analysis consisted of 33 national and international peer-reviewed journal articles discussing visionary leadership, *kiai* leadership, and the transformation of *pesantren* management, published between 2018 and 2025. The research instrument was a thematic coding sheet developed by the researchers to systematically classify the findings of each selected study into three analytical categories: (1) the concepts and characteristics of visionary leadership; (2) the roles of visionary leadership in the transformation of *pesantren* management; and (3) the supporting and inhibiting factors influencing its implementation.

Data were collected through a systematic search of online academic databases, including Google Scholar, Garuda, and the Directory of Open Access Journals (DOAJ), using the keywords “visionary leadership,” “*pesantren* management transformation,” “*kiai* leadership,” and “*pesantren* governance.” The retrieved articles were screened according to predefined inclusion criteria, namely thematic relevance, publication within the last ten years (2018–2025), and publication in indexed scholarly journals. Articles meeting these criteria were downloaded, carefully reviewed, and analyzed comprehensively to extract relevant information.

The collected data were analyzed using content analysis, which involved identifying, categorizing, comparing, and synthesizing evidence from each selected publication based on the three predetermined thematic categories. This analytical process enabled the researchers to identify recurring patterns, similarities, differences, and

emerging perspectives across the existing literature concerning visionary leadership and the transformation of *pesantren* management. To ensure the trustworthiness and credibility of the findings, source triangulation was employed by comparing and cross-validating evidence from multiple studies addressing similar topics. Consequently, the conclusions of this study were established through the convergence of findings from various scholarly sources rather than relying on a single reference, thereby enhancing the validity and robustness of the synthesized results.

## RESULTS AND DISCUSSION

### MERAUKE AND DUTCH NEW GUINEA IN THE COLONIAL CONTEXT

#### The Establishment of the Merauke Colonial Post (1902)

The Dutch presence in Papua was not an abrupt development. VOC navigators had already reached the Papuan coasts as early as 1606, when Captain Willem Jansz sailed along the western and southern shores of the island. It was not until 1828, however, that the Dutch formally asserted their claim over the western part of the island as a constituent territory of the Dutch East Indies. Over the subsequent seven decades, this claim remained almost entirely nominal; the territory was vast, the terrain formidable, and the indigenous Papuan inhabitants living in scattered hunter-gatherer communities in the interior remained only marginally connected to the colonial administrative system (Webb et al., 1987).

The real impetus for more substantive colonial penetration arose from the geopolitical dynamics of the late nineteenth century. In 1884, Germany raised its flag over the northeastern part of Papua, while Britain proclaimed its claim over the southeastern sector from Port Moresby. Threatened by the prospect of Papua being closed off to other European powers, the Dutch colonial government in Batavia promptly designated the 141st meridian east as the eastern boundary of its jurisdiction a line extending from Jayapura in the north to Merauke in the south. The boundary agreement with Britain was codified in *Staatsblad van Nederlandsch-Indië* Nos. 220 and 221 of 1895, and was subsequently recognized by Germany in 1910. In 1898, the Netherlands East Indies government established administrative posts at Fakfak and Manokwari; four years thereafter, in 1902, Merauke followed suit as the southernmost outpost of the entire colonial administrative network in Papua (Bone, 1958).

Merauke is a town situated in a lowland swamp plain, bisected by the deltas of the Digul, Kumbe, and Bian rivers. This landscape constitutes a crocodile haven: a mosaic of mangrove forests, peat swamps, meandering rivers, and tidal estuaries provides an almost ideal habitat for *Crocodylus porosus* (the saltwater crocodile), the largest crocodilian species in the world, and *Crocodylus novaeguineae* (the New Guinea crocodile), which inhabits the freshwater areas further inland (Schoorl, 2001). As Dutch colonial officials commenced the establishment of posts in and around Merauke, they promptly recognized the extraordinary economic potential of the region's abundant crocodile populations.

#### Pre-World War II Economic Conditions

Prior to the Second World War, economic activities in Netherlands New Guinea as a whole remained highly circumscribed. There were no large-scale plantations of the kind found in Java or Sumatra, no commercially operational mines, and infrastructure roads, wharves, and storage facilities was virtually nonexistent. What existed was, in the most literal sense, untamed wilderness: impenetrable jungle, untouched swamplands, and seas abounding in natural resources. Within this context, the most accessible faunal resources that yielded immediate market value were wild animals whose hides commanded high prices on the international market namely crocodiles, monitor lizards, and various species of pythons (Koentjaraningrat, 1994).

Archival sources from the early twentieth century indicate that the demand for crocodile skins grew in tandem with the burgeoning fashion industry in Europe and the United States, which increasingly favored exotic leathers sourced from tropical regions. Anthropologists and economic historians have documented that the demand for crocodile, python, and monitor lizard skins from the Dutch East Indies experienced rapid growth from the 1920s onward, reaching its zenith in the 1940s and 1950s (Schoorl, 2001). This trend furnished a powerful incentive for

traders and commercial enterprises to penetrate regions that had previously remained virtually untouched, including Merauke and its surrounding territories.

## **CROCODILE ECOLOGY IN PAPUA AND THE COMMODITY BASE**

### **Crocodile Species as Commodities**

Papua is home to two crocodile species that were commercially the most valuable in Southeast Asia. The first is the saltwater or estuarine crocodile, *Crocodylus porosus*, which inhabits estuarine waters, mangrove lagoons, and large rivers near the coast. It is the largest crocodilian species in the world: mature males can attain lengths exceeding six meters and weigh over one metric ton. Its skin, particularly the abdominal section (belly cut), possesses a fine texture, regular scale patterning, and exceptional tensile strength, rendering it the most coveted raw material in the luxury leather goods industry (Hughes, 2009). The second is the New Guinea crocodile or freshwater crocodile, *Crocodylus novaeguineae*, which is smaller and inhabits inland swamps. Its hide is also highly valued, although it is generally regarded as being of slightly inferior quality to that of *Crocodylus porosus*.

From the early twentieth century onward, saltwater crocodile skins from Papua and other coastal regions of the Dutch East Indies began to flow into international markets. Historians of the leather industry have noted that the demand for reptilian skins crocodile, python, and monitor lizard began to increase markedly among European fashion industries from the mid-nineteenth century and surged dramatically after the First World War, when exotic leather products became status symbols among the European and American upper classes (Webb et al., 1987). It was within this context that the swamplands of Merauke, with their abundant crocodile populations, emerged as a highly promising commodity frontier.

### **Population Abundance and Drivers of Exploitation**

Prior to the era of large-scale commercial hunting, the population of *Crocodylus porosus* along the southern coast of Papua was estimated to be extraordinarily large. Early reports from explorers and Dutch colonial officials describe the rivers around Merauke as teeming with crocodiles, particularly along the delta of the Digul River, which empties into the Arafura Sea (Boon, 2013). The geographical conditions of Merauke thousands of kilometers of muddy coastline, an extensive network of rivers, and virtually boundless wetlands created an ideal habitat for the reproduction and proliferation of both species.

Several factors concurrently drove crocodile exploitation in this region: (1) the accessibility of abundant populations, particularly in estuarine areas and along major rivers; (2) the relatively simple hunting technology involved rifles, spears, and traps which could be deployed by local labor forces without modern technical training; (3) the exceptionally high market value of the skins in European export markets; and (4) the absence of meaningful protective regulations during the first decades of the twentieth century. The convergence of these factors created conditions conducive to intensive hunting, which would ultimately have a dramatic impact on crocodile populations (Garnaut & Manning, 1974).

## **COMMODITY CHAIN: FROM THE MERAUKE SWAMPS TO SINGAPORE**

### **Hunting Patterns and the Role of Indigenous Communities**

Prior to the advent of European commercial interests, the Marind-anim tribes the indigenous inhabitants of the Merauke region and its environs had maintained a complex relationship with crocodiles. In Marind-anim mythology, the crocodile was regarded as a mahuk (totemic ancestor) held in veneration; hunting was conducted within ritual contexts, with the meat consumed and specific body parts utilized in customary ceremonies (van Baal, 1966). This sacred relationship underwent a profound transformation once crocodile skins became a trade commodity.

The system of crocodile skin collection that developed during the colonial era generally operated across several tiers. First, hunters from the Marind-anim, Asmat, or other coastal communities undertook crocodile hunting, either independently or at the behest of intermediary traders. Payment was typically rendered in kind cloth, tobacco, canned goods, and, later, currency at values substantially below those obtained by middlemen at the port. Second, intermediary traders, usually of Chinese or Malay descent who had established a presence in the Papuan region earlier,



aggregated these skins from the villages and transported them to Merauke (Bone, 1958). Third, in Merauke, the skins were purchased by agents of Dutch trading companies or directly exported via regular shipping routes to Singapore or Batavia.

### **The IMEX Company and the Dominance of Dutch Trade**

The most prominent institutional actor in the trade of Papua's natural resources during the first half of the twentieth century was IMEX (Import en Export Maatschappij), a Dutch trading firm established by two former pilots of the Royal Netherlands Air Force: Crick Verhey van Wijk and F.F.D. (Folef) Baron d'Aulnis de Bourouill. IMEX commenced operations in the Asmat region in 1953, establishing itself as the third most influential commercial force in Papua after the colonial government and the Catholic missionaries (Schoorl, 2001).

IMEX's two primary commodities were ironwood (*merbau*) and crocodile skins. Within its operational areas in Asmat and Merauke, IMEX built a procurement network that relied on indigenous and Chinese middlemen to aggregate crocodile skins from hunting communities dispersed across the vast swamp regions. Accounts by Karel Knödler and Hein van der Schoot, archived by [papuaerfgoed.org](http://papuaerfgoed.org), describe how IMEX established collection posts at various points along the rivers of the Asmat region and southern Papua, effectively creating a monopsony a situation wherein a single buyer dominates the market from the demand side vis-à-vis the local hunters (Schoorl, 2001).

Although IMEX did not officially begin operations until 1953, the crocodile skin trade in the Merauke region had, in fact, commenced much earlier. Colonial administrative reports from the 1920s and 1930s already make mention of reptile skin exports from the area, albeit on a smaller and more sporadic scale. IMEX, in essence, merely consolidated, expanded, and more systematically organized the pre-existing trade.

### **The Merauke Singapore Trade Route**

From Merauke, crocodile skins were dispatched via shipping routes connecting the southern coast of Papua with the main maritime arteries of the Dutch East Indies. The port of Merauke, though modest in scale, functioned as a consolidation point for cargo originating from the entire surrounding region. Vessels of the KPM (Koninklijke Paketvaart Maatschappij), the Dutch shipping line that dominated inter-island routes within the Dutch East Indies, regularly called at Merauke on their voyages along the southern Papuan coast. From Merauke, shipments were generally conveyed either to Batavia (Jakarta) or directly to Singapore, depending on schedules and the types of vessels available (Haag, 1962).

Singapore played a pivotal role in this commodity chain. As a free port established by the British in 1819, Singapore evolved into the most significant entrepôt hub in Southeast Asia: it received raw commodities from across the region, processed and sorted them, and redistributed them to international markets. Between 1918 and 1925, nearly all over 80% of the wild animals and wildlife products exported from the Dutch East Indies passed through the port of Singapore (Tan, 2021). Reptile skins, including crocodile hides, constituted a substantial component of these commodity flows.

In Singapore, crocodile skins were handled by well-established networks of Chinese merchants and European trading firms. Some were processed locally tanned, preserved, and cut according to buyer specifications while others were transshipped onward to Europe, particularly to France, Italy, England, and the Netherlands, where the luxury leather goods industry was flourishing. The robust commercial ties between Singapore and merchants from the Dutch East Indies rendered the city a natural conduit for commodities originating from Papua.

One of the most compelling illustrations of this interconnectedness is the emergence of Singapore's crocodile leather craft industry, which had its origins in the colonial era. In 1924, David George Stead, Commissioner of Fisheries for British Malaya, had already proposed that Singapore be established as a regional center for the crocodile leather industry. By the late 1930s, the leather craftsman Kwan Pen Seng had established a crocodile skin bag manufacturing enterprise in Singapore, which subsequently developed into the internationally recognized luxury brand KWANPEN a brand built upon raw crocodile skins that predominantly flowed from regions such as Merauke in the Dutch East Indies (Haag, 1962).

**Table 1. Estimated Volume of Crocodile Hunting in Papua (1950s to 1980s)**

| Period    | Estimated Hides/Year                       | Information                                                                                 |
|-----------|--------------------------------------------|---------------------------------------------------------------------------------------------|
| 1950–1960 | Thousands (exact figures not yet recorded) | The peak of unregulated hunting; IMEX active in Asmat.                                      |
| 1977–1980 | >20,000/year ( <i>C. novaeguineae</i> )    | Regulations began to be implemented after 1970; harvests remained high in Papua New Guinea. |
| 1980-an   | 12.000–20.000/year                         | Decline in wild populations; ranching begins to develop.                                    |

*Sumber: Wikipedia: New Guinea Crocodile; IUCN CSG Report; Webb, Manolis & Whitehead (Webb et al., 1987)*

## SINGAPORE AS AN ENTREPÔT HUB IN THE EXOTIC SKIN TRADE

### Singapore in the Colonial Trade Architecture

To understand why Singapore became the primary destination for crocodile skin exports from Merauke, it is necessary to situate the city within the broader architecture of colonial trade in Southeast Asia. Singapore was established as a free port by Sir Stamford Raffles in 1819, and from its inception, it evolved not as a producer of commodities, but as a distributor and nexus. The absence of tariffs, the lack of trade barriers, and its strategic geographic position at the crossroads of sea lanes between the Indian Ocean and the South China Sea rendered it a magnet for trade across the entire region. By 1916, Singapore had already become the seventh-largest port in the world by tonnage. Trade in the city was overwhelmingly dominated by two parties: European trading firms, which controlled commerce around New Harbour (now Keppel Harbour), and Chinese merchants, who monopolized activities along the Singapore River. This same pattern prevailed in the exotic skin trade from the Dutch East Indies: Dutch or European firms served as the primary receivers of skins from the eastern archipelago, while Chinese merchants functioned as intermediaries and brokers on the ground.

### The Flow of Wildlife Commodities from the Dutch East Indies to Singapore

Research conducted on the basis of archives held by the National Archives of Singapore reveals a clear picture of Singapore's dominance in the wildlife trade of the Dutch East Indies. Between 1918 and 1925, more than 80 per cent of wild animals and animal products exported from the Dutch East Indies encompassing live animals, bones, horns, feathers, and skins—passed through Singapore as an intermediate port (Daniels, 1929; Tan, 2021). In this capacity, Singapore performed a function analogous to an "auction market" for Southeast Asian exotic commodities: it attracted buyers from around the world, provided storage and processing facilities, and connected small-scale traders in the interior of the Dutch East Indies with retail markets in Europe.

This trade was not without friction. Archival records indicate that tensions grew between the Dutch colonial government and the British colonial authorities in Singapore concerning unregulated wildlife trade. In 1928, Karel Willem Dammerman, Director of the Buitenzorg (Bogor) Zoological Museum and Chairman of the Netherlands Indies Society for the Protection of Nature, wrote to Carl Boden Kloss, Director of the Raffles Museum in Singapore, requesting cooperation in curbing illegal imports of orangutans from the Dutch East Indies. In 1929, the Dutch Consul-General, Willem Daniels, dispatched an official letter to the British Colonial Government, calling for legislative action to prohibit the entry of orangutans into the British colony (Nederlandsch-Indië, 1895). The debate that began with the orangutan subsequently extended to other species, reflecting a growing albeit gradual awareness among colonial bureaucrats of the need to regulate wildlife trade.

### Singapore's Crocodile Skin Industry as a Reflection of Demand

The growth of the crocodile skin industry in Singapore itself constitutes the clearest reflection of the immense demand for exotic hides that flowed through the city. In 1924, David George Stead, Commissioner of Fisheries for British Malaya, had already recommended Singapore as a centre for the development of a regional crocodile skin industry. During the 1930s, initial experiments in crocodile skin processing were conducted by Lancelot Jermyn, a member of the Malayan Education Service, who eventually succeeded in developing effective tanning techniques (Wikipedia: Crocodile Farming in Singapore). In the late 1930s, within a climate already highly propitious for the crocodile skin trade, Kwan Pen Seng established a crocodile leather craft workshop in colonial Singapore, catering to British soldiers and aristocrats who became his loyal clientele. This constituted the precursor to KWANPEN, the luxury crocodile bag brand now renowned worldwide. The fact that a Chinese craftsman in Singapore was able to build a sustainable crocodile leather business from 1938 onward is tangible evidence that the supply of raw crocodile skins from regions such as Papua and Kalimantan was sufficiently abundant and readily accessible through Singapore's trading networks.

## ECOLOGICAL, SOCIAL, AND REGULATORY IMPACTS

### Ecological Pressure: From Abundance to Local Extirpation

The ecological impact of unregulated crocodile hunting during the colonial era was truly dramatic. *Crocodylus porosus*, as a species characterized by a low reproductive rate (females lay eggs only once annually, with a single clutch typically containing 40-60 eggs, and only a small fraction surviving to adulthood), is highly vulnerable to overexploitation. Saltwater crocodile populations across the Indo-Pacific region came under immense pressure between the 1940s and 1970s. In northern Australia, for instance, populations declined by as much as 95 per cent from pre-hunting levels by 1971. In Papua and its surrounding regions, a similar trajectory almost certainly occurred, although accurate quantitative data remain difficult to obtain given the near-absence of systematic population surveys prior to the post-colonial era (Webb et al., 1987).

For *Crocodylus novaeguineae*, populations in northern Papua also experienced severe pressure during the 1950s and 1960s, to such an extent that concerned parties began to fear local extinction. It was not until approximately 1970 that protective legislation began to be enacted in Papua New Guinea, though enforcement remained weak. On the Indonesian side, regulations for the province of Papua were only more seriously tightened during the 1980s, following an FAO-funded survey project conducted between 1986 and 1992 (Group, 2009).

### Socio-Cultural Impacts on Indigenous Papuan Communities

The socio-cultural dimension of crocodile commodification for indigenous Papuan communities reflects a broader process experienced by virtually all indigenous societies under colonialism: the forced transformation from a ritual-based subsistence economy and local exchange systems toward an export-oriented market economy subject to international price fluctuations. For the Marind-anim, the crocodile was not merely prey; it was an integral part of cosmology, genealogy, and identity. The shift in the crocodile's status from ritual totem to trade commodity not only altered hunting practices but also gradually eroded the spiritual and social meanings inherent in the human crocodile relationship within these indigenous societies (van Baal, 1966).

From an economic standpoint, indigenous communities engaged as hunters derived only a minuscule share of the profits from this commodity chain. The monopsonistic structure dominated by intermediary traders and Dutch trading firms ensured that the actual value-added accrued to merchants in Merauke, Singapore, and ultimately in European industrial cities rather than to the local hunters who bore the greatest physical risks in crocodile hunting. This inequitable pattern of value distribution is characteristic of what development economists would later term a "commodity trap": the extraction of raw natural resources with low sale value, the primary benefits of which are enjoyed by actors at the downstream end of the production chain.

### Seeds of Regulation at the End of the Colonial Era

Ironically, awareness of the need for regulation grew concurrently with the peak of exploitation. During the 1950s, when IMEX remained actively operational in Asmat and Merauke, several Dutch researchers and officials had already begun to voice concerns regarding the ecological and social impacts of the logging and crocodile hunting activities conducted by the company. (Tan, 2021) notes that just as awareness of the social and ecological repercussions of such enterprises began to increase, the Dutch colonial government and the people of West New Guinea were confronting a threat perceived as more pressing namely, Indonesia's claim over the territory of Papua with the result that environmental and social justice issues did not receive the priority they warranted.

#### **DISCUSSION: THE CROCODILE SKIN TRADE IN COLONIAL ENVIRONMENTAL HISTORY PERSPECTIVE**

The narrative of the Merauke–Singapore crocodile skin trade is, in many respects, a story that epitomizes the general dynamics of the colonial capitalist system in Southeast Asia. It demonstrates how a peripheral region politically under Dutch colonial control yet economically integrated into circuits of global trade was exploited for the extraction of high-value natural resources destined for consumers in other hemispheres, with profoundly disproportionate returns for the local inhabitants.

Within the framework of environmental history, this case also illustrates what J. Donald Hughes terms "imperial ecology" the manner in which the colonial system structurally encouraged the excessive and unsustainable exploitation of natural resources in colonial territories, since short-term benefits flowed to the metropole while the long-term costs of ecological degradation were borne by the region of origin. The collapse of crocodile populations in West Papua during the 1950s and 1960s was a near-inevitable consequence of a system that prioritized capital accumulation over considerations of ecological sustainability.

On the other hand, this case also reveals the complexity of local agency under colonial conditions. The Marind-anim and Asmat hunters were not passive actors simply subjected to exploitation. They made choices within existing constraints choices to sell crocodile skins to intermediary traders in exchange for goods they needed or desired. Yet these choices were made within a profoundly unequal structure, in which price information, market access, and bargaining power were all commanded by colonial actors and more powerful intermediaries.

One aspect worthy of further attention is the gender dimension of this trade. In traditional Papuan societies, the hunting of large animals, including crocodiles, was the domain of men. The commodification of crocodiles thus specifically affected the economic and social lives of men, transforming their role from ritual hunters into a kind of "wage labour" within a global supply chain a transformation that undoubtedly carried profound implications for social structures, power relations, and gender identities within these communities.

#### **CONCLUSION**

The Merauke–Singapore crocodile skin trade during the Dutch colonial period constitutes a historical fragment which, although modest in scale compared to major commodities such as rubber or tin, yields exceptionally rich insights into the dynamics of colonialism, global trade, and human–environment relations. This article has demonstrated that this trading network connected indigenous Papuan communities far removed from colonial centres of power with luxury markets in Europe, via Singapore as a vital nodal intermediary; that the Dutch trading firm IMEX served as a key institutional actor organizing the exploitation of crocodile resources in southern Papua; that Singapore, by virtue of its free-port status, played a decisive entrepôt role in the redistribution of this commodity to global markets; and that the ecological consequences of large-scale unregulated hunting on Papuan crocodile populations were severe.

This study acknowledges the limitations inherent in this historical reconstruction: the scarcity of systematically documented archival data on the volume and value of crocodile skin trade from Papua prior to the decolonization era means that certain analytical sections have necessarily relied upon indirect reconstructions from comparative sources and ecological reports. This also constitutes a call for researchers of Papuan history and Dutch



colonial trade history to delve more deeply into the archives of the Nationaal Archief in The Hague, the KPM (Koninklijke Paketvaart Maatschappij) archives, and any extant documents pertaining to IMEX, in order to assemble a more complete and detailed picture of this important yet overlooked trade.

In a world increasingly conscious of the biodiversity crisis and the imperatives of justice for indigenous peoples, the story of the Merauke crocodiles whose hides flowed to the luxury boutiques of Europe via the port of Singapore stands as a living reminder: how seemingly innocuous luxury products possess long and intricate genealogies, entailing the exploitation of nature and of people in remote corners of the world, far removed from the gaze of the final consumer.

## REFERENCES

- Bone, R. C. (1958). *The Dynamics of the Western New Guinea (Irian Barat) Problem*. Cornell University Southeast Asia Program.
- Boon, G. C. (2013). *Technology and Entrepot Colonialism in Singapore, 1819–1940*. Institute of Southeast Asian Studies.
- Daniels, W. (1929). *Prohibition of the Importation of Orang Utan from Dutch East Indies into the Straits Settlements: Letter from W. Daniels to Colonial Secretary of Straits Settlements*. National Archives of Singapore.
- Garnaut, R., & Manning, C. (1974). *Irian Jaya: The Transformation of a Melanesian Economy*. Australian National University Press.
- Group, I. C. S. (2009). *Crocodylus novaeguineae: Status Survey and Conservation Action Plan*. IUCN/SSC Crocodile Specialist Group.
- Haag, N. A. Den. (1962). *Archief van het Ministerie van Koloniën, Nederlandse Nieuw-Guinea, 1900–1962 [Arsip Kementerian Koloni Belanda, Nugini Belanda]*. Nationaal Archief.
- Hughes, J. D. (2009). *An Environmental History of the World: Humankind's Changing Role in the Community of Life* (2nd ed.). Routledge.
- Jelden, D. C. (1980). Preliminary Studies on the Breeding Biology of *Crocodylus porosus* and *Crocodylus n. novaguineae* on the Middle Sepik (Papua New Guinea). *Amphibia-Reptilia*, 1(3), 353–358.
- Ken, W. L. (1978a). *A History of Straits Settlements Foreign Trade 1870–1915*. Koon Wah Lithographers.
- Ken, W. L. (1978b). Singapore: Its Growth as an Entrepot Port, 1819–1941. *Journal of Southeast Asian Studies*, 9(1), 50–84.
- Koentjaraningrat. (1994). *Penduduk Irian Barat*. PT. Penerbitan Universitas.
- Nederlandsch-Indië, S. van. (1895). *Staatsblad van Nederlandsch-Indië. 1895, No. 220 dan 221 [Tentang Penetapan Batas Wilayah Nugini Belanda dengan Wilayah Nugini Inggris]*.
- Schoorl, P. (Ed.). (2001). *Belanda di Irian Jaya: Amtenar di Masa Penuh Gejolak 1945–1962*. Garba Budaya & KITLV-Jakarta.
- Tan, Z. H. (2021). A Beastly Business: Regulating the Wildlife Trade in Colonial Singapore. *BiblioAsia*, 17(1).
- van Baal, J. (1966). *Dema: Description and Analysis of Marind-anim Culture (South New Guinea)*. Martinus Nijhoff.
- Webb, G. J. W., Manolis, S. C., & Whitehead, P. J. (Eds.). (1987). *Wildlife Management: Crocodiles and Alligators*. Surrey Beatty & Sons.