

Module: Archaeology of the Egyptian State
Name: Fangyuan Sheng
Student ID: 00115961
Date: 18 April 2025

Exploring the Economy of Ancient Egypt: An Analysis of Economic Lists in the *Papyrus Harris I*

1. Introduction

Papyrus Harris I (hereafter referred to as “*Papyrus Harris I*” or “the *Papyrus*”), also known as *The Great Papyrus Harris*, is one of the most significant manuscripts housed in the British Museum. Measuring approximately 42 meters in length and comprising 1,489 lines of text, it is the largest known papyrus of the *volumen* type. The manuscript is named after Mr. Anthony Charles Harris, who acquired it in Luxor in February 1855. Despite uncertainties surrounding its discovery and provenance, its historical and archaeological value is undeniable.

Serving as a tool of royal propaganda, *Papyrus Harris I* was designed to reinforce loyalty among both the clergy and the Egyptian administration (Grandet 1994). The text contains four royal speeches delivered by Ramesses III (1184-1153BC) to the gods of major and minor temples, as well as one speech directed to humans (Table 1). In these addresses, the king commemorates his achievements and emphasizes his lavish donations to the temples of Thebes, Heliopolis, Memphis, and several smaller religious centers. Following each speech, the *Papyrus* presents detailed economic lists, recording the goods allocated by the king. These records provide invaluable insights into the economic structure of Egypt during his reign.

Table 1: Structure of *Papyrus Harris I*, after Grandet (1994)

	Speech to gods										Summary
	Small Temples		Memphis		Heliopolis		Thebes		Vignette		
Speech to human	Lists	Royal speech	Lists	Royal speech	Petition	Lists	Royal speech	Petition	Royal speech	Vignette	
Summary of lists	Petition		Petition		Petition		Petition		Petition		

2. The Economic Lists and the Research Method

The economic lists in the *Papyrus* are divided into six sections (A–F), each documenting different types of allocations: means of production (A), regular annual allowances (B), random allocations of general goods (C), cyclical grain distributions (E), and other cyclical goods (F) received by the

temples (Grandet 1994). This essay primarily examines *Lists A* and *Lists B* from Thebes, Heliopolis, and Memphis, as they provide a consistent, structured view of the economic system and taxation in ancient Egypt through recurring allocations, in contrast to the more irregular entries found in other sections. Additionally, the “speech to gods” section is considered, as it offers crucial contextual insights that enhance the interpretation of the economic lists.

To address the inconsistencies in the economic lists and improve the accuracy of the original text, this study employs a structured analytical approach grounded in modern accounting standards. The contents of *List A* have been reclassified into categories such as *human resources*, *property*, *plant and equipment*, and *current assets*, while *List B* has been reorganized into *monetary assets*, *manufactured products*, *biological assets*, and *other*. Numerical figures have also been revised to reflect corrected calculations. The revised table is provided in the appendix (Appendix I), along with translations of selected original passages referenced throughout this essay (Appendix II). The translations are based on the book *Le Papyrus Harris I* (Grandet 1994).

3. Economic Mode of Egypt

One of the most striking observations from *Lists A* and *Lists B* is the frequent mention of boats, appearing in both royal endowments and taxation records (e.g., 11.8, 12b.10, 32a.5). This is no coincidence; rather, it highlights the central role of the Nile River and the temple economy in ancient Egypt. Boats, primarily a means of transportation and later incorporated into religious ritual, connect the key components of Egypt’s economic system.

3.1 River Economy

The Nile was the backbone of Egypt’s economic, social, and religious life. Multiple references to river-related elements in *Papyrus Harris I*, such as “Qerer and Mensh boats” (11.8), the “Great River” (10.7), the “western bank” (51a.5), and mentions of aquatic birds and fish (12b.6 and 12b.9), demonstrate the profound influence of the Nile on the economy. This influence can be categorized into three key areas: (1) agriculture and food production, (2) transportation and centralized administration, and (3) religious life and rituals.

3.1.1 The Nile and Agricultural Prosperity

The Nile River was vital to Egypt’s agricultural economy. Evidence of fishing and hunting activities dates back to the Stone Age (Shaw 2000) and is vividly depicted in tomb paintings from different periods. A notable New Kingdom example is the Tomb of Menna, where Menna and his family are shown on reed boats, hunting waterfowl and catching fish (Figure 1). *Papyrus Harris I* provides further insight into the industry’s scale: Thebes (12b.6) and Heliopolis (32b.11) together received 326,995 aquatic birds from bird catchers and fishermen, while Thebes (12b.9), Heliopolis (32b.11), and Memphis (52a.1) collectively received a total of 1,416 geese, highlighting the economic importance of fishing and waterfowl hunting.



Figure 1: Menna and Family Hunting in the Marshes, Tomb of Menna
(JSTOR, <https://www.jstor.org/stable/community.27407828>)

Beyond its aquatic resources, the Nile's annual inundation deposited nutrient-rich silt, creating fertile soil ideal for emmer and barley cultivation. These crops, along with their byproducts - bread and beer, were not only dietary staples but also key indicators of wealth and economic stability (Murray 2000). Brewery and bakery scenes are depicted in many Egyptian tombs, notably in the Tomb of Ty (Figure 2). In *List B*, Ramesses III donated 309,950 and 77,100 bags of grain to the temples of Thebes and Heliopolis, respectively, reflecting the immense scale of grain production. Additionally, the need to manage the Nile's floodwaters spurred the development of irrigation systems such as channels and flood basins (7.10), which improved agricultural productivity by controlling water flow and reducing soil salinity (Nicholson and Shaw 2000).



Figure 2: Scenes of Brewing and Baking from the Tomb of Ty
 (After Chazan and Lehner 1990: Fig.4)

3.1.2 Waterway Transportation and Centralized Administration

The Nile served as Egypt's primary transportation and communication route, connecting Upper Egypt with the Delta and facilitating the movement of goods, people, and resources across the country. Boats were not only indispensable for fishing but also played a critical role in trade, administration, and military logistics.

By the Late Neolithic period, Egyptians had already mastered the construction of sizable reed boats (Abubakr 1955). Tomb depictions at el-Kab, near Hierakonpolis, illustrate six large boats used for various purposes (Figure 3). Similarly, *Papyrus Harris I* documents that Thebes received 83 Qerer and Mensh boats (11.8), Heliopolis 3 boats (32a.5), and Memphis 2 boats (51a.13) through royal

endowment. While the exact function of these vessels remains uncertain, many were likely integral to state administration and economic logistics.

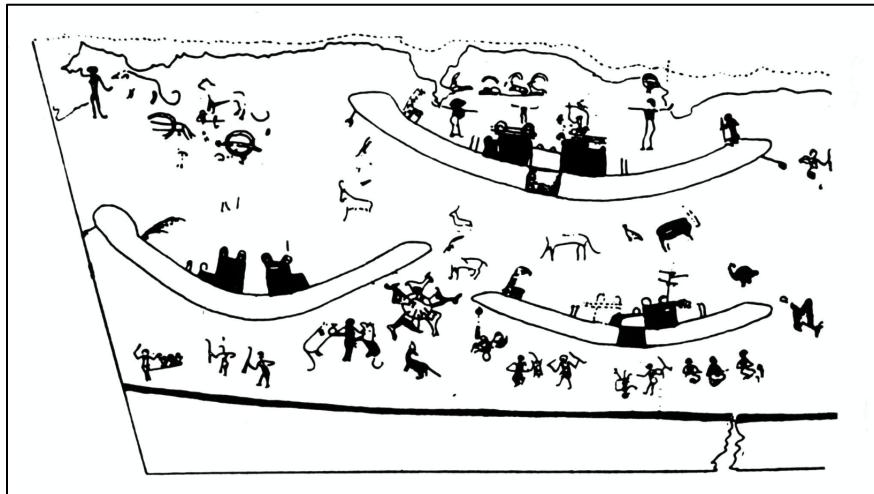


Figure 3: Tomb Painting at el-Kab from the Late Neolithic period (After Abubakr 1955)

The Egyptian state maintained control over grain production, which was carefully measured, taxed, and stored in granaries after harvest. The collected grain served multiple purposes, including wages for laborers and emergency relief during shortages. Boats were used to transport surplus grain to regions affected by crop failures, reinforcing the state's authority and ensuring economic stability.

The central administration's reliance on Nile-based transport is explicitly stated in the *Papyrus* (29.1):

"I have made for you ships, Qerer and Mensh, equipped with personnel, in order to transport the goods of the land of the god to your treasury and your storehouse."

This passage highlights how the state's economic infrastructure depended on an extensive riverine transportation network, demonstrating the indispensable role of the Nile in Egypt's centralized administration.

3.1.3 The Nile in Religious Life

Beyond its direct economic contribution, the Nile also shaped Egypt's mythological systems, thereby intertwining the river economy with spiritual and social life.

The imagery of the river and boats featured prominently in Egyptian religious beliefs. In cosmology, the sun god Re traversed the vast celestial ocean each day in his *mandjet* or "day barque", accompanied by his daughter Maat and other deities. At night, he descended into the underworld in the *mesketet* or "evening barque", navigating the netherworld before rising again. Sokar, the god of the dead in the Memphite region, was believed to guide the deceased king in the afterlife with *henu* barque. The Sokar festival, celebrated annually during the fourth month of the

Akhet season, took place in Memphis and western Thebes during the New Kingdom (Wilkinson 2003). The pharaoh, regarded as a living god, also had a royal barque that carried his effigy during festivals (Figure 4).

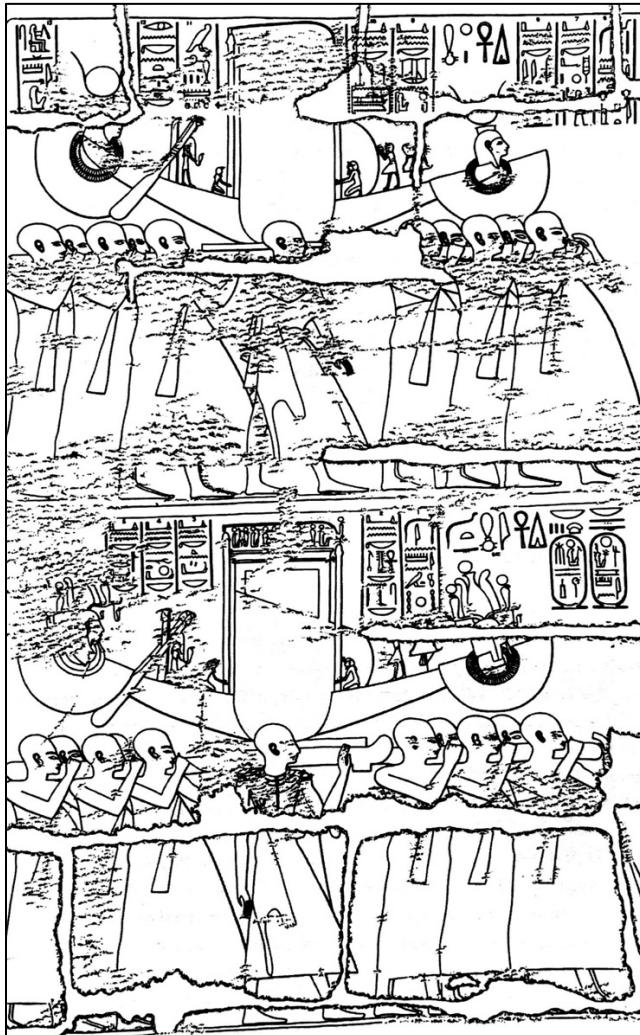


Figure 4: Festival Procession Scenes Showing the Portable Barque of Amun (Top) and the Barque of Ramesses III (Bottom) Being Carried upon the Shoulders of the Priests
(After Teeter 2012: Fig.2.2)

Papyrus Harris I mentions that Ramesses III donated various precious stones for the portable barque of the temple (46.8):

"I have made a great inventory of your portable barque, which has been newly clothed, in the castle of the gold of your temple, with perfect gold, silver from the Gebel, real lapis lazuli, turquoise, and all kinds of precious stones."

This account underscores the deep connection between material wealth and religious devotion in ancient Egypt, where economic resources were not only practical assets but also vital to sustaining sacred traditions.

3.2 Temple Economy

Temples in ancient Egypt functioned not only as religious centers but also as crucial economic institutions, serving a central function in the administrative and redistributive systems. Their economic significance is evident in the extensive resources they controlled, their involvement in state-managed redistribution networks, and the ideological framework they provided to justify and sustain economic production.

As detailed in *List A*, Ramesses III allocated substantial resources to both major and minor temples throughout Egypt. Thebes, for example, received 86,486 people, 65 cities, 864,168 arouras of land, 46 carpentry workshops specializing in pine and acacia, 433 gardens and groves, 83 Qerer and Mensh boats, and 421,362 bovids, along with various smaller livestock. In addition to these resources, temples were also granted significant quantities of metals, manufactured goods, and other commodities, as outlined in *List B*. Muhs (2016) estimated that the land allocated in the *Papyrus*, totaling 1,071,780 arouras, accounted for 13%-18% of the total cultivated land in Ramessid Egypt. Since this estimate does not account for earlier temple holdings, the actual percentage was likely even higher. Such extensive land ownership provides direct evidence to temples' roles in Egypt's economy.

With access to labor, workshops, land, transportation vehicles, and a range of both primary and secondary resources, temples were well-positioned to engage in both production and redistribution. They either managed agricultural estates directly or leased land to farmers (Muhs 2016). Additionally, the "speech to gods" section further illustrates the division of labor within temples, designating specific occupational roles to individuals. The table below summarizes key occupations recorded in the *Papyrus*, along with their corresponding references for ease of consultation.

Table 2: Occupations Mentioned in *Papyrus Harris I*

Occupations	Entries
Honey collectors and incense carriers	(28.3), (48.2), (46.1)
Hunters	(28.4)
(Crews of) rowers	(28.5)
Guards of quay, barley, the canal police	(28.6), (28.8)
Gatekeepers	(28.7)
Gardeners	(7.10), (27.10), (29.4)
Brokers	(46.2)
Serfs	(12a.1), (12b.2), (45.8), (47.9), (57.8), (59.1), (59.11), (60.3), (76.5)
Workers	(58.8)

By the New Kingdom, the state increasingly relied on large temple complexes to manage the receipt, disbursement, and accounting of state revenues, effectively integrating them into the broader royal treasury and granary system. This role is further reflected in *Papyrus Harris I*, which records the deployment of personnel to transport grain and other resources to temple treasuries and granaries (28.3, 48.1 and 48.3).

Furthermore, religious rituals heightened temples' economic importance by generating demand for offerings and material goods. Much of ancient Egypt's economy was demand-driven, with these demands closely linked to religious practices. Monuments such as pyramids and temples were built for religious purposes, consuming vast human and material resources. Besides, religious ceremonies created demand for both common and luxury items. For instance, rations were supplied for the gods' daily ritual service (6.2), while special imports like pine from the Levant (30.4 and 46.7) were brought in for occasional festivals and other non-regular rituals. Another notable feature of the economic lists is the uneven distribution of endowments across different cities (Table 3). Over 80% of the resources in *List A*, excluding "cities", were allocated to Thebes. This disproportionate distribution is particularly striking given that Memphis, despite being the capital and administrative center for much of ancient Egypt's history, received a significantly smaller share of the king's endowments. One possible explanation is that certain donations intended for smaller Memphis temples were not documented in the Memphis section of the list. Alternatively, this disparity may reflect Thebes' growing religious significance under Ramesses III, particularly with the construction of the mortuary temple at Medinet Habu. If so, this unequal allocation of resources underscores the pivotal role of religion in shaping Egypt's economic landscape and suggests a hierarchy within the temple economy, whereby cities with more prominent temples gained access to greater resources.

Table 3 : Major Endowments in List A and Their Proportions

Endowments	Thebes	Heliopolis	Memphis	Total	Thebes %	Heliopolis%	Memphis%
Cities	65	103	1	169	38%	61%	1%
People	86,486	12,364	3,079	101,929	85%	12%	3%
Land	864,168	160,084	10,154	1,034,406	84%	15%	1%
Pine and Acacia Carpentry Workshops	46	5.5	0	51.5	89%	11%	-
Gardens and Groves	433	64	5	502	86%	13%	1%
Qerer and Mensh Boats	83	3	2	88	94%	3%	2%
Livestock	421,362	45,544	10,047	476,953	88%	10%	2%

4. Taxation of Egypt

The ancient Egyptians did not develop coinage until the end of the Dynastic period and most transactions and taxes were conducted through a bartering system (Vogelsang-Eastwood 2000). During the reign of Ramesses III, taxes were levied in kind, with payments made through tangible assets. *List B* meticulously records the assets collected as tax contributions to the temple, serving as a comprehensive tax report that reflects both the tax base and the distribution of tax burdens across different cities.

4.1 Tax in Kind (Tax Base)

The assets recorded in *List B* include monetary assets, manufactured products, and biological assets (see appendix I). The monetary assets encompass three types of metals (gold, copper, and silver), while the manufactured products covered eight categories (incense, honey, oil, fabric, grain, vegetables, wood, and drinks). Biological assets mainly consist of bovids, geese, and waterfowl. Given the extensive variety of items listed, a comprehensive analysis of each is beyond the scope of this essay. Instead, the discussion will focus on fabric, a commodity recognized for its ubiquity across social strata and its dual significance in secular and sacred contexts.

Various types of fabric, each with distinct qualities, are listed in all three temple records. Notably, in Thebes, three types of fabric (cloth, thread, and linen) are recorded, collectively constituting one-third of the manufactured product tax categories. The substantial quantities of these items suggest high demand for fabric in temple activities, highlighting its importance both for daily operations and religious ceremonies.

Secularly, fabrics made of flax (*Linum usitatissimum*) and other fibres served a wide range of practical purposes (Hall 1986), ranging from everyday items such as dresses and bags to specialized uses like bandages and lamp wicks. Beyond household applications, fabrics were integral to production processes, facilitating the extraction of oils and juices, equipping animals and chariots, and serving as sails for boats. More significantly, fabric held substantial economic value within Egypt's barter-based system. Textiles, including cloth and garments, functioned as a medium of exchange, with evidence from Papyrus Turin 1881 (Vogelsang-Eastwood 2000) and here in *List B* (e.g., 12a.13, 12a.14, 12b.5) indicating that wages and taxes were frequently settled in this form.

Fabric's significance also extended deeply into funerary rituals and temple practices. In burial rituals, cloth was placed in tombs, covering various objects such as coffins, amulets, statues, and, most crucially, the deceased. Linen bandages were essential in the mummification process, preserving the body and symbolically transforming it into Osiris, the god of the dead and arguably the archetypal mummy in Egyptian mythology. Within temple settings, fabric had numerous sacred uses. Flags made of cloth were prominently displayed outside temple pylons and within courtyards. During daily rituals, statues of deities were wrapped in fine textiles, while portable boats used in religious ceremonies were similarly adorned. In his royal speech to Thebes and Memphis, Ramesses III describes how fabric was used to decorate the boats of the gods Mut and Khonsu in a new manner, as well as how the statues of gods from Memphis were clothed:

(6.12) “I have clothed the portable boats of Mut and Khonsu (which were) fashioned in a new way by means of perfect gold in thick plating, inlaid with all sorts of precious stones...”

(50.2) “I clothed them with garments of royal cloth and mek cloth, I anointed the wig of each of them with medjet oil.....”

4.2 Tax Advantages

As discussed in the temple economy section, the tax burden imposed on ancient Egyptian populations exhibits considerable regional variation. In this context, Thebes holds a clear advantage in terms of the total tax. However, looking at absolute tax totals alone doesn't fully capture the dynamics of taxation. To better assess the relative tax burden across cities, this analysis introduces two key measures: “tax per capita” and the “tax per capita index”. These metrics enable a comparative evaluation of tax burdens and resource specialization, shedding light on the economic and geographic factors shaping regional tax profiles.

4.2.1 Methodology: Tax Per Capita and Tax Per Capita Index

The “tax per capita” measures the average tax burden per individual in a given city, calculated by dividing the total tax levied by the estimated number of taxpayers. Due to the absence of comprehensive data on total taxation and population figures, this study employs proxies: the total tax contributions to temples (*List B*) serve as the numerator (total tax), while the number of people the king invested in temples (*List A*) approximates the denominator (population). Though both figures are estimates, their ratio yields an indicator of individual tax obligations in supporting temple activities.

To further refine the analysis, the “tax per capita index” is introduced as a relative measure. This index is computed by dividing the “tax per capita” value of one city by that of another. The index facilitates a comparative assessment of the relative efficiency of different cities in generating specific types of taxes. A higher index value indicates a city's greater efficiency or capacity in generating a particular resource. Together, the metrics provide insight into both the allocation of tax responsibilities and the relative economic specialization among urban centers.

4.2.2 Findings: Comparative Tax Advantages

The results of the calculations, summarized in Table 4 below, reveal distinct regional variations in tax advantages:

- (a) Thebes demonstrates strong competitiveness in the provision of monetary assets (2.17) and linen (2.29).
- (b) Heliopolis excels in supplying vegetables (1.99) and fabric (1.91).
- (c) Memphis has a comparative advantage in providing grains (0.51).

Table 4: Tax Per Capita and Tax Per Capita Index of Thebes, Heliopolis, and Memphis

Tax	Tax Per Capita			Tax Per Capita Index	
	T	H	M	T/H	H/M
Gold Equivalent*	0.09	0.04	0.05	2.17	0.78
Grain	3.58	6.24	12.15	0.57	0.51
Fine Fabric	0.04	0.08	0.04	0.52	1.91
Linen	0.74	0.32	-	2.29	-
Wine	0.29	0.19	0.13	1.52	1.52
Honey, Incense, Oil	0.01	0.04	-	0.31	-
Vegetables	0.29	0.39	0.19	0.73	1.99
Geese	0.01	0.04	0.04	0.20	1.00
Bovids	0.01	0.01	0.00	1.26	1.63
Boat	0.00	0.00	-	1.47	-
Thread	0.04	-	-	-	-
Aquatic Birds	3.35	3.03	-	1.10	-
Live Tax Geese	0.01	0.04	0.04	0.20	1.00

* To facilitate a comprehensive comparison of monetary assets, a gold-equivalent value is calculated by converting copper and silver into gold using exchange rates of 1:104 and 1:2, respectively, as outlined by Muhs (2016). The converted values are then summed with the total gold amount to provide a unified measure.

The tax advantage of Heliopolis and Memphis in agricultural resources are readily explained by their locations near the Nile Delta, a region renowned for its fertility and suitability for crops such as vegetables and grains. Thebes' specialization in gold and linen, however, requires a deeper exploration.

A closer look at *List B* reveals that Thebes not only has the highest gold and linen tax among the three cities but also provides a rare breakdown of gold sources. This could be attributed to both the city's geographic position and its prominent religious status.

Located near the Eastern Desert, Thebes played a central role in gold extraction and trade. Egyptian sources identified three primary gold mining regions (Vercoutter 1959), two of which are recorded in *List B* of Thebes:

(12a.7) Gold from the Gebel of Coptos: 61.3 deben

(12a.8) Gold of Kush: 290.8 1/8 deben

The “gold of Coptos” was sourced from mines in the Eastern Desert, specifically the Ham-mamat to Abbad region, while the “gold of Kush” originated farther south, from modern-day Sudan and parts of Ethiopia. A third region, not mentioned in the *Papyrus*, the “gold of Wawat” was situated between the other two and was extracted from the Wadis Allagi and Gabgaba. Jack Ogden (2000) summarizes the evolved path of gold extraction over time. In the Old Kingdom, gold extraction mainly focused on Coptos gold from the Eastern Desert. However, during the Middle Kingdom and early New Kingdom, attention shifted to the southern sources. By the late New Kingdom, interest in the Eastern Desert mines was renewed. He suggests that northern mines had likely been exhausted for a period, but advances in mining technologies during the late New Kingdom enabled the extraction of gold from previously depleted regions. The disparity in *List B*, with Kush gold

outweighing Coptos gold by a factor of five (see above, 12a.7 and 12a.8), aligns with this narrative, suggesting a reliance on southern imports by the time of Ramesses III.

Additionally, Thebes' religious prominence likely contributed to its higher tax burdens on both gold and linen. As a major religious center, its temples maintained a considerable demand for gold, as evidenced in the “speech to the gods” of Thebes which records six ritual applications of the gold:

- (1) Gilding divine statues (4.10-11)
- (2) Decorating architecture, either as a surface embellishment or as an integral construction material (4.12)
- (3) Crafting religious vessels (5.12),
- (4) Adorning statues, in the form of gold necklaces or amulets (6.3)
- (5) Serving as a medium for religious texts, in which gold was hammered into books or tablets (6.5)
- (6) Framing sacred barks (7.5)

Similarly, Thebes' high demand for linen can be attributed to its connection to funerary practices. The manufacture of linen fabrics from flax dates back to the Neolithic period, as seen in the Fayum A culture, and linen later became widely used in the mummification process. (Abdel-Maksoud and El-Amin 2011; Hall 1986). Although the royal speeches of the *Papyrus* do not explicitly mention the use of linen, Thebes' proximity to the Valley of the Kings and Queens implies a substantial need for linen bandages. The city's dual role as a religious and funerary center explains its elevated demand for both gold and linen.

5. Conclusion and Topics for Further Exploration

This essay investigated the economic system and taxation during the reign of Ramesses III, based on the economic records in *List A* and *List B* of the *Papyrus Harris I*. The findings reveal the river economy as the fundamental structure of ancient Egyptian society, with temples playing a key role in the economic system. This is supported by the variety of fishing and agricultural products recorded in the tax list, and the prominent role of boats, which were indispensable for both waterway transport and religious ceremonies. In terms of regional tax advantages, the data in the *Papyrus* highlight distinct specializations: Memphis and Heliopolis excelled in agricultural contributions, leveraging their proximity to the fertile Nile Delta, while Thebes demonstrated a competitive edge in gold and linen taxation, likely due to its access to gold-bearing regions and its elevated religious status.

Beyond these findings, two additional areas merit further scholarly investigation:

- (1) Central Administration and Institutional Structure:** Both the economic lists and the royal speech in the *Papyrus* mention several titles used during the reign of Ramesses III, such as vizier (10.10), controller (7.4), magistrate (10.4), director (51a.4), and standard-bearer (11.1). The *papyrus* also references an important figure, Hori, recognized as both scribe and grand

controller. These titles and figures offer a window into the political structure and military organization of the time, inviting deeper exploration of institutional relationships and power distribution. Of particular interest are entries 59.11 and 59.12, which document the king's emphasis on the temple's autonomy over land management, shielding it from the interference of the vizier. This raises questions about whether this reflects a conflict of interest between religious and administrative institutions or, as Eyre (Eyre 2012) suggests, a routine restoration of authority following temporary vizierial management of depleted endowments.

- (2) Warfare and Post-War Treatment of Conquered Peoples:** The *Papyrus* also records the military engagements of Ramesses III, notably against Libyan tribes and the Sea Peoples, with his victories celebrated in both the text and the reliefs at Medinet Habu (University of Chicago Epigraphic Survey 1930). Following these conflicts, the *Papyrus* details the treatment of the defeated peoples. It describes the settlement of nomads in military camps (76.8-9), where they were subjected to taxation and integrated into religious frameworks (9.1). Among the captives, elite soldiers were branded and enslaved to serve the Egyptian state (77.6), while princes and princesses from ruling families were taken as hostages to Egypt (31.8). This practice not only secured the loyalty of foreign leaders but also fostered diplomatic ties with future rulers.

Due to word constraints, these topics cannot be fully explored here, yet they underscore the *Papyrus*' archaeological and historical significance. As the longest known papyrus from ancient Egypt, the *Papyrus Harris I* provides an unparalleled record of Ramesses III's era, vividly capturing the political, economic, and social dimensions of New Kingdom society. Credit is due to its collector, Mr. Harris, whose efforts ensured the preservation of this invaluable historical document, enabling its study in academic research.

Word count: 4,267

Appendix I: Revised Economic Lists

Thebes:

List A	
Human Resources	
(10.3) The castle of the king of Upper and Lower Egypt (Ousermaâtrê Meryimen) v.s.f., in the domain of Amon in the southern and northern part(s) (of the country), under the direction of the officials of the temples of this domain, provided (the castle) with all its goods	62,626 people
(10.4) The house of (Ousermaâtrê Meryimen) v.s.f., in the domain of Amon in the southern and northern part(s) (of the country) , under the direction of the magistrates, provided with all its goods	970 people
(10.5) The house of (Ramesses Heqaiunu) v.s.f., in the domain of Amun in the southern and northern part(s) (of the country) , under the direction of the magistrates, provided with all its goods	2,623
(10.6) The castle of (Ramses Heqaiounou) v.s.f. who joins in joy, in the domain of Amon, under the direction of the First servant of the god (of Amon) , provided (the castle) with all its goods	49 people
(10.7) The herd of (Usermaâtrê Meryimen) v.s.f., in the domain of Amon, which is at (Usermaâtrê Meryimen -v.s.f.-who-takes-prisoner-the-rebels, on the Great River	113 people
(10.8) The herd of (Ousermaâtrê Méryimen v.s.f.) which defeats the Meshwesh, on the Eau-de-Rê, under the direction of the majordomo Pégé. Meshwesh	971 people
(10.9) The herd of (Ramses Heqaiounou) v.s.f., in the domain of Amon, on the Great River	1,867 people
(10.10) The herd (Ousermaâtrê Meryimen)v.s.f., in the domain of Amon, (whose personnel is) made up of the people (inhabiting the region) of the Great River, under the direction of the vizier of the southern part (of the country)	34 people
(10.11) The herd of (Ramses Heqaiounou)v.s.f., in the domain of Amon, under the direction of the director of bovids Kay	279 people
(10.12) The city of Pi-(Ramses Heqaiounou -v.s.f.-great-of-victories, which Pharaoh v.s.f. made for you (Amon) in the northern part (of the country, and which was) administratively attached to the domain of Amonrasonther, saying “It is because you will have made sure that it is established for eternity and perpetuity, that you will be victorious”	7,872 people
(10.13) The house of (Ramses Heqaiounou)v.s.f., in the domain of Khonsu	294 people
(10.14) Persons he gave to the domain of Khonsu-in-Thebes-Neferhotep-Horus-lord-of-joy.	247 people
(10.15) Kharyou and Nehsyou whom His Majesty v.s.f. captured and whom he gave to the domain of Amonrasonther, to the domain of Mout and to the domain of Khonsu. Survivors	2,607 people
(10.16) The team of (Usermaâtrê Meryimen v.s.f. who maintains his castle, in the domain of Amon. Colonists that he gave to this domain	770 people
(11.1) The shine of the group statues for which the magistrates, the standard-bearers, the controllers and the people of the country work, (11.2) and which Pharaoh v.s.f. has administratively attached to the domain of Amonrasonther, in order to protect and to guarantee them for eternity and sustainability. (11.3) Divine (Statues): 2756. Which makes	5,164 people
(11.4) Total	86,486 people
Property, Plant and Equipment	
(11.10) Cities of Kemet	56
(11.11) Cities of Kharou and Kush	9
Total	65

(11.7) Land	864,168 arouras 1/4
(11.9) Pine and acacia carpentry workshops	46
(11.6) Gardens and groves	433
(11.8) Qerer and mensh boats	83
Current Asset	
(11.5) Bovidae and various small livestock	421, 362

List B	
Monetary Asset	
(12a.6) Perfect gold	217.5 deben
(12a.7) Gold from the Gebel of Coptos	61.3 deben
(12a.8) Gold of Kush	290.8 1/8 deben
(12a.9) Total of perfect gold and gold of the gebel	569.6 1/8 deben
(12a.10) Silver	10,964.9 deben
(12a.11) Total gold and silver	11,546.8 deben
(12a.12) Copper	26,320 deben
(12b.2) Silver, representing the goods of contributions on the production of the serfs which were given for the divine offering 265	3,606.1 deben
Manufactured Product	
(12a.13) Royal cloth, mk cloth, fine cloth of good quality, fine cloth, smooth cloth	3,722 miscellaneous clothing
(12a.14) Thread	3,795 deben
(12a.15) Incense, honey, oil	1,047 various vases
(12b.1) Drink šdh and wine	25,405 various vases
(12b.3) Grain measured in (quadruple-) heqat, representing the contribution to the production of peasants	309,950 bags
(12b.4) Vegetables widt	24,650 boots <i>mrw</i>
(12b.5) Linen	64,000 boots <i>n'h</i>
(12b.10) Pine-tree: Skt and diy boats	11
(12b.11) Acacia : skt boats, ihyt-mrw, wsh, hnt-ihw, trt and Kr	71
(12b.12) Total. Pine-tree and acacia	82 boats
Biological Asset	
(12b.6) Aquatic birds, representing contributions to the production of bird catchers and fishermen	289,530.
(12b.7) Oxen, ox calves, various livestock, short-horned oxen, bovids, bovids of weight (?) bovids representing a fraction of the livestock of Kemet	847
(12b.8) Oxen, ox calves, long-horned oxen, various livestock, short-horned oxen bovids representing the contributions to the production of the (different) regions of Kharou	19
Total	866
(12b.9) Live tax geese	741
Other	
(12b.13) Goods of Oasis(es) in innumerable quantity, intended for divine offering.	

Heliopolis:

List A	
Human Resources	
(31.3) The castle of (Ramses Heqaounou) v.s.f., in the domain of Re, under the direction of the Great of Seers and Magistrates, (provided with) all its goods	1,485 people
(31.4) The people he gave to the domain of Toum-Lord-of-the-Double-Country-the-Heliopolitan-Re-Horakhty and who are administratively attached to the castle, under his (the Great of the Seers) direction	4,583 people
(31.5) Those of the castle of (Ramses Heqaounou v.s.f., in the domain of Re, north of Heliopolis, under the direction of the scribe and grand controller Parahotep 531, equipped (i.e. the institution in question) with all its goods	2,177 people
(31.6) The pleasure house of Pharaoh v.s.f., which is in this place, under the direction of the scribe and grand controller Djehutymes and the magistrates	1,779 people
(31.7) The Newfoundland of (Ramsès Héqaounou v.s.f.-who-makes-live-the-Double-Country, under the direction of the scribe and grand controller Hori	247 people
(31.8) Sennenyu charioteers, children of princes, Maryannou charioteers and Apérou soldiers. Colonists who are in this place	2,093 people
(31.9) Total	12,364 people (corrected)
Property, Plant and Equipment	
(32a.6) Cities of Kemet	103
(32a.3) Lands	160,084 arouras 1/2 1/4
(32a.2) Gardens and groves	64
(32a.4) Pine and acacia carpentry workshops	5 1/2
(32a.5) Qerer and mensh boats	3
Current Asset	
(32a.1) Miscellaneous livestock	45,544

List B	
Monetary Asset	
(32a.10) Silver	586.3 2/3 1/4 deben
(32b.1) Copper	1,260 deben
(32b.5) silver, (representing the) goods of contributions on the production of people intended (= the goods) for divine offerings	456.3 1/2 deben
Manufactured Product	
(32b.2) Royal fabric, mk fabric, very good quality fine fabric, good quality fine fabric, fine fabric, smooth fabric	1,019 various clothes
(32b.3) Incense, honey, oil	482 various vases
(32b.4) Drink šdh and wine	2,385 vases
(32b.6) Grain (representing) contributions on peasant production	77,100 bags
(32b.7) Vegetables width	4,800 boots <i>mrw</i>
(32b.8) Linen	4,000 boots <i>n'h</i>
(32b.12) Pine-tree: diy boats	1
(32b.13) Acacia: wsh and kr boats	7
Biological Asset	
(32b.9) Aquatic birds, representing contributions to the production of bird catchers and fishermen	37,465 birds
(32b.10) Oxen, ox calves, miscellaneous livestock, short-horned oxen, bovids, heavy bovids, representing a fraction of the livestock	98
(32b.11) Live tax geese	540 1/2
Other	
Goods of Oasis(es) in innumerable quantity, intended for divine offering.	

Memphis:

List A	
Human Resources	
(51a.3) The castle of (Ramses Heqaiounou v.s.f., in the domain of Ptah, under the direction of the magistrates	609 people
(51a.4) The herd of (Ramses Héqaiounou v.s.f., in the domain of Ptah, under the direction of the director of bovids Houy	1,361 people
(51a.5) The city of Pi-(Usermaâtrê Meryimen) v.s.f., on the western bank of the West River, under the direction of the majordomo (imy-r pr) Pennestytaouy	40 people
(51a.6) The house of (Ramses Heqaiounou) v.s.f., in the domain of Ptah, under the direction of Huy, who was (previously) major-domo (3-n-pr)	16 people
(51a.7) Persons whom he gave to the domain of Ptah-the-Great, he-who-is-to-the-south-of-his-wall, lord of Ânkhtawy, and who are (administratively attached) to the castle, under the direction of the Grand-of-Artisans and the magistrates	841 people
(51a.8) Ptah of (Ramses Héqaiounou v.s.f. who finds the place, in the domain of Ptah, under the direction of the delegate Ptahmosé	7 people
(51a.9) Kharyou and Nehsyou whom His Majesty v.s.f. captured and whom he gave to the domain of Ptah	205 people
(51a.10) Total	3,079 people
Property, Plant and Equipment	
(51b.2) City	1
(51b.1) Lands	10,154 arouras
(51a.12) Gardens and groves	5
(51a.13) Qerer and mensh boats	2
Current Asset	
(51a.11) Cattle miscellaneous	10,047

List B	
Monetary Asset	
(51b.7) Gold	98.3 2/3 1/4 deben
(51b.10) Silver representing the goods of contributions on the production of the people intended for the divine offering	141.3 1/10 deben
Manufactured Products	
(51b.11) Grain, representing contributions on peasant production	37 400 bags
(51b.8) Fine fabric of good quality, fine fabric, smooth fabric	133 1/2 various clothes
(51b.9) Wine	390 jars
(51b.12) Vegetables width	600 boots <i>mrw</i>
biological Assets	
(51b.13) Oxen, calves, short-horned oxen, bovids, bovids of weight (?)bovids representing a fraction of the livestock	15 1/2
(52a.1) Live tax geese	135
Other	
(52a.2) Goods of Kemet, goods of the Double-Land of the God, goods of Kharou, goods of Kush (52a.3) and of the Oases, intended for divine offering, in innumerable quantity	

Appendix II: Translations

(4.10)....I fashioned (the statues of) Ptah-Sokar, Nefertum and (the members of) the Ennead of the lords of heaven and earth, which are installed in its naos, plated with perfect gold, (4.11) with embossed silver, and inlaid with genuine precious stones firmly fitted.

(4.12) ...like the great castle of Toum which is in heaven, with a colonnade, doorposts and leaves of electrum, as well as a large window of apparition of perfect gold.

(5.12) I have made for you a large offering table of embossed silver, overlaid with perfect gold and with figurines of fine gold, bearing statues of the Lord in embossed gold, and loaded with the divine offerings which are presented before you.

(6.3) I have made for you august amulets of gold inlaid (with precious stones) and large necklaces (with) counterweights of fine gold of the best quality, in order to attach them to your chest each time you appear in your great consecrated place of Ipet-sout.

(6.5) I have made for you large books of hammered gold, inscribed with the great name of Your Majesty and bearing my prayers.

(7.10) I have made for you vineyards in the Northern Oasis and in the Southern Oasis, (in number) unlimited, (as well as) others in the southern part of the country, innumerable, (while) their number has been increased in Lower Egypt, hundreds of thousands (of times). I have equipped them with gardeners (who are) foreign prisoners, with basins which I have dug.

(9.1) I have built for you a castle difficult to access in the land of Djahy, similar to the horizon of the sky which is in the heavens:the castle of Ramesses Heqaiounou in Canaan.

(28.3) I have made for you teams of honey collectors and incense carriers, in order to transport their annual production to your august treasury.

(28.8) I have made companies of guards for the canal police; guards of the pure sheret barley (have been assigned to you).

(30.4) I have framed large boats for your great daughter Iousâas-Nébet-Hétépet and (for) Sépa-in-Heliopolis, (30.5) using trunks of umbrella pine from the forests of Lebanon, covered with gold like the boat-of-millions.

(48.1) I have made for you stables with oxen and calves, and workshops for the fattening of fowls, with fattened geese ab, and dovecotes for the birds to be sacrificed to your ka every day.

(48.3) I have made for you grain enclosures, filled with barley and emmer wheat in numerous piles reaching to the sky 700, in order to supply your temple every day for the sake of your beloved face, He-who-made-heaven-and-earth.

(58.8).... I have provided it with workers (people charged with tasks) , while it is rich and fulfilled of all that exists, and I have made for him divine offerings which are brought to his altar, (my) father (58.9) Osiris, lord of To-Djoser.

(59.11) ... I have left the priests and the controllers of his domain to their (own) direction, in order to direct his community of serfs and to administer his domain; I have made (the) vizier cease to dispose (59.12) of them and I have delivered all (the members of) his who had been under his (= of the vizier's) influence.

(76.8) They have been annihilated, taken captive in one (single) time and brought as such to Kemet, (numerous) like the grains of sand on the bank.I have established them in fortresses, subject to my name; (76.9) their young men are numerous like hundreds of thousands; to all of them, I have allocated annually clothing and food rations from the treasuries and the grain enclosures.

Bibliography

- Abdel-Maksoud, Gomaa, and Abdel-Rahman El-Amin. 2011. “A Review on the Materials Used During the Mummification Processes in Ancient Egypt.” *Mediterranean Archaeology and Archaeometry (MAA)* 11 (2): 129–50.
- Abubakr, Abdel Moneim. 1955. “Divine Boats of Ancient Egypt.” *Archaeology* 8 (2): 96–101.
- Chazan, Michael, and Mark Lehner. 1990. “An Ancient Analogy : Pot Baked Bread in Ancient Egypt and Mesopotamia.” *Paléorient* 16 (2): 21–35.
<https://doi.org/10.3406/paleo.1990.4530>.
- Eyre, Christopher J. 2012. “Society, Economy, and Administrative Process in Late Ramesside Egypt.” In *Ramesses III: The Life and Times of Egypt’s Last Hero*, 101–50. University of Michigan Press.
- Grandet, Pierre. 1994. *Le Papyrus Harris I (BM9999)*. Bibliothèque d’étude 109. Le Caire: Institut français d’archéologie orientale du Caire.
- Hall, Rosalind. 1986. *Egyptian Textiles*. Shire Egyptology 4. Aylesbury: Shire.
- Muhs, Brian. 2016. *The Ancient Egyptian Economy: 3000–30 BCE*. 1st ed. Cambridge University Press. <https://doi.org/10.1017/CBO9781316286364>.
- Murray, Mary Anne. 2000. “Cereal Production and Processing.” In *Ancient Egyptian Materials and Technology*, 505–36.
- Nicholson, Paul T., and Ian Shaw. 2000. *Ancient Egyptian Materials and Technology*. Cambridge University Press.
- Shaw, Ian. 2000. *The Oxford History of Ancient Egypt*. New ed. Oxford Illustrated History. Oxford: University Press. <https://doi.org/10.1093/oso/9780198150343.001.0001>.
- Teeter, Emily. 2012. “Change and Continuity in Religion and Religious Practices in Ramesside Egypt.” In *Ramesses III: The Life and Times of Egypt’s Last Hero*, 52. University of Michigan Press.
- University of Chicago Epigraphic Survey. 1930. *Medinet Habu*. University of Chicago Oriental Institute Publications ; Chicago: University of Chicago Press.
- Vercoutter, Jean. 1959. “The Gold of Kush.” *Kush* 7:120–53.
- Vogelsang-Eastwood, Gillian. 2000. “Textile.” In *Ancient Egyptian Materials and Technology*, 268–98. Cambridge University Press.
- Wilkinson, Richard H. 2003. *The Complete Gods and Goddesses of Ancient Egypt*. New York: Thames & Hudson.