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EXPLORING THE MESOPOTAMIAN TRADE (C.6000-539 BCE): TYPES, ORGANIZATION, AND EXPANSION

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ABSTRACT

Archaeological and literary sources recovered from the extant of Ancient Mesopotamia and beyond its confines revealed that the empire has enjoyed a well-established internal as well as international trade (like with Egypt and probably east Africa towards westwards and Afghanistan, Indus valley, Persian Gulf and Arabian towards east) since Neolithic times i.e., c. 6000 BCE. Archaeologists and scholars have contributed specifically to distinguished aspects and themes of Mesopotamian trade due to availability of versatile records from different sites of different periods. Present study has examined the conducted works on specific aspects of ancient Mesopotamian trade i.e., types (inter-city, intra-city and international along with transport sources), organization (mechanism, control, regulation, local merchants, foreign merchants, legal issues, and diplomacy), imports and exports (quality and quantity), transaction system (barter and currency). With the help of these works, a general picture of trade from its emergence to its invasion in hands of Achaeminians, has been made by following analytical methodology.

INTRODUCTION

Mesopotamia, located in present-day Iraq, is considered one of the cradles of civilization. The region is known for being home to the world's first urban civilization, Sumer, which emerged around 4000 BCE. The Sumerians developed a sophisticated system of writing, known as cuneiform, which allowed them to record their history, laws, and literature. They also built impressive infrastructure, such as canals and irrigation systems, which helped them to cultivate crops and support a growing population.

Over time, Mesopotamia was ruled by various empires, including the Akkadian Empire (2334-2154 BCE), the Babylonian Empire (1894-539 BCE), and the Assyrian Empire (1365-609 BCE). These empires were built on the achievements of the Sumerians, creating their own laws, cultures, and religious beliefs. The Babylonians, for example, developed a code of laws known as the Code of Hammurabi, which was one of the earliest known legal codes in history.

Despite the many conflicts and changes in power, Mesopotamia continued to be a center of trade and cultural exchange. Its location between the Tigris and Euphrates rivers made it a natural crossroads between the civilizations of the Mediterranean, India, and China. The region's legacy can still be felt today, in fields such as literature, architecture, and mathematics (Pondany 2014:7-28).

The phenomenon of Mesopotamian Trade[1] is constructible on the bases of accumulation of archaeological remains i.e., sites along with exported and imported objects, literary sources i.e., cuneiform tablets and other legal documents. Beside these it also depends on the availability of natural resources within Mesopotamian areas, surrounded accessible regions and far-off places. One more important aspect of trade is the availability of transport and its means, which in turn related to social setup, advancement in technology, geographical setup, and water channels. There is always need an authority to control such phenomena and the authorities can be political or religious or may be both. All these aspects have been summarized in the present study.

Basic Data of Trade

The primary sources of information for trade in Mesopotamia are archaeological excavations and cuneiform inscriptions. While many products and commodities have been discovered within the region, Mesopotamian goods found outside the area also provide insight into ancient trade practices (Amele 1994: 31). Cuneiform writings on trade consist of a range of documents, including contracts, lists of goods, letters about trade, and records of different trade types (Nejat 1998: 265). For instance, inscriptions from the Ur III period (2112-2004 BCE) reveal a wide variety of products and commodities, as well as their equivalent silver values (Widell 2005: 138).

Most of the information on trade during the Old Assyrian period (c. 1900-c. 1830 BCE) is derived from the Karum Kanesh site in Anatolia. The settlement of merchants located in northwestern central Anatolia provided over 15,000 inscribed tablets, shedding light on the period's commercial activities (Amele 1994: 90-92). Meanwhile, inscribed clay sealings from the Accemhuyuk site

[1] The word "Trade" initially used in Middle English superficially seems to be taken from Middle Low German or Middle Dutch, meaning “a pathway” or “beaten track”. The meaning extends to the experience of some profession in the 16th century. The current sense of the word is the act or commerce of exchanging supplies by barter or sale, conflicting to those that were present initially (Adams 1992:141). Trade involves the buying and selling of various items such as goods and belongings within a particular area, between different cities, and even across different territories (Nejat 1998:265).

near the Great Salt Lake have provided crucial information about Mesopotamian trade practices and their extensive trading network (Amele 1994: 90-92).

In addition, records such as the Rimah writings, Mari records, Tell Leilam objects, and Shamshera tablets have furnished historians with knowledge of trade during the reign of Shamshi-Adad I (1813-1781 BCE) in Assyria. Unfortunately, no digital records exist for the period of Hammurabi and the First Dynasty of Babylon (1894-1595 BCE). As a result, scholars have had to rely on documents from other sites to fill in the gaps in our understanding of this period's trade (Amele 1994: 85-108).

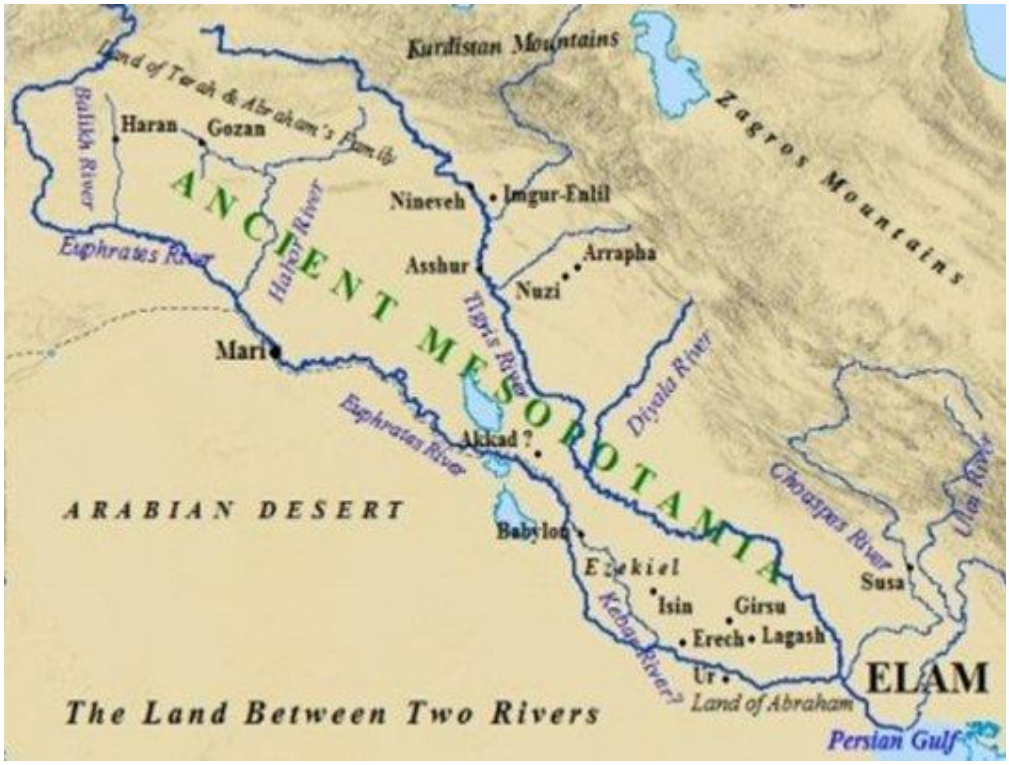
Trade Routes

Mesopotamia, located east of the Persian Gulf and west of Baghdad (Gruber 1948:69), was a region heavily reliant on rivers and canals as primary water transport routes for bulk goods, as they were more convenient than taking land routes. However, the north-west winds made the Euphrates and Tigris rivers difficult to navigate. As a result, canals, and small rivers such as the Khabur provided easy access for Assyria. In addition to these waterways, Mesopotamia also had maritime routes to other regions including the Gulf to India, Arabia's southern coast, and the Red Sea (Algaze 2008: 38-42).

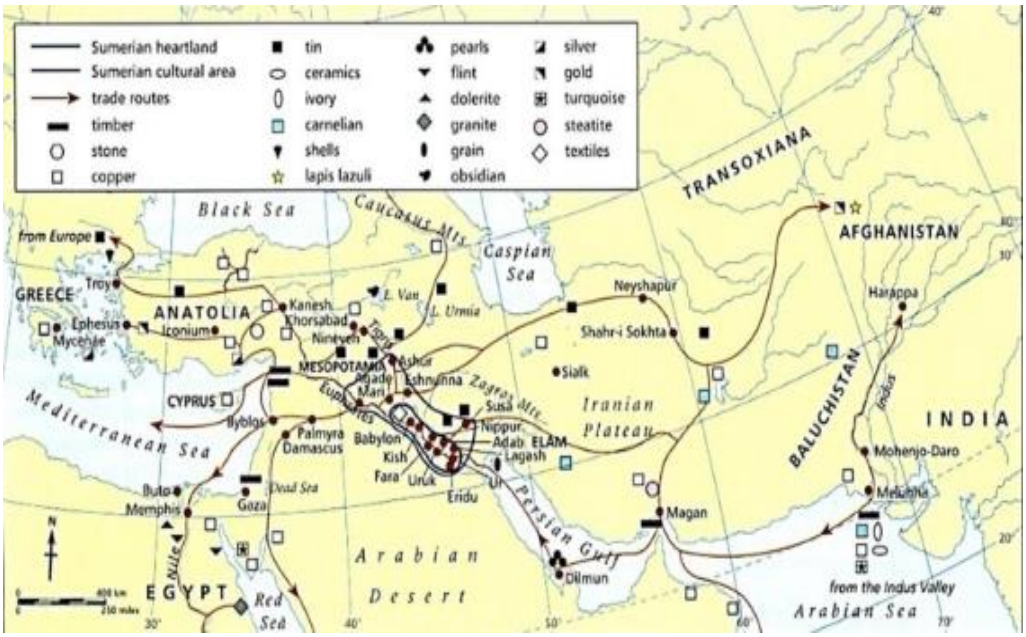
In the past, the Euphrates River in the west and the Zagros foothills in the east were crucial land pathways. Initially, people traveled using the waterway of the Euphrates and canals leading to the Tigris before it became easy to navigate. Following that, overland routes along the Tigris were used, passing through Assur and Ekallatum. They traveled further north to Shubat-Enlil and then across the steppe to Harran. From there, they turned south and crossed the Euphrates near Tuttul, before heading west along the Euphrates to Emar, a 1,000-kilometer route (Mcintosh 2005:138).

Amele (1994: 87-100) identified three major caravan routes that were in use during the Ashur period. One route traveled from Ur to Nippur and then to Ashur. The second route probably stretched along the Tigris, while the third route went from Elam through Der, east of the Tigris, and then across to Ashur. Another important caravan route was from Mari through the Oasis of Tadmor to Qatna, which was controlled at its eastern end by Qatna and by Mari in the west. From Qatna, roads headed south to Damascus and westward through the Homes-Tripoli gap, eventually reaching the Mediterranean and the large port of archives. Goods were transported by river, and a route led from Mari to Emar (now known as Tell Meskene) and then by land to Aleppo. Emar was also the terminus of a long overland route, which passed through the Jezira and crossed the Euphrates at Carchemish.

During the Kassite rule, a route linked Babylonia through the Diyala with the Iranian plateau and beyond, by which lapis lazuli mined in Badakhshan in northeastern Afghanistan reached to Babylonia (Algaze 2008: 50-51).



Map No. 1: Euphrates River (top left), Tigris River (top right), Persian Gulf (bottom right), Kurdistan Mountains, and Zagros Mountains in ancient Mesopotamia (mid right to top center).[2]



Map No. 2: Possible Sea and Land Trade Routes along with Deposits of Natural Resources[3].

[2] https://www.timetoast.com/timelines/important-events-of-ancient-mesopotamia-civilzation
[3] https://www.maritimeheritage.org/ports/egypt.html.

Types of Trade

Mesopotamia was a civilization that established international trade routes to acquire exotic items from foreign lands. They used both sea and land routes to conduct trade with other civilizations, and their trade relationships extended as far as India and Egypt (Amele 1994:31).

The Mesopotamians had three types of trade practices. The first type involved exchanging Mesopotamian goods with foreign goods, allowing them to acquire goods that were not available in their region and establish diplomatic relationships with other civilizations.

The second type of trade involved importing and exporting goods within Mesopotamia, which allowed the Mesopotamians to distribute their surplus goods across different regions and establish a thriving marketplace economy. They had specialized markets for different types of goods, and this internal trade helped to boost the overall economic growth of the civilization.

The third type of trade was composed of shopkeepers who sold various goods in the local markets. These shopkeepers were an essential part of the Mesopotamian economy and society, and their trade practices helped to support the internal trade and marketplace economy of the civilization (Nardo & Kebric 2007:294-297).

Natural Resources and Production

Trade was a crucial factor in the ancient Mesopotamian economy, particularly foreign trade due to the scarcity of essential natural resources such as metals, wood, stones, wine, and semiprecious minerals (Nardo & Kebric 2007:294-297; Algaze 2008:50-51). The emergence of a merchant class was also a result of this scarcity, and it led to the development of overland trade routes to the Middle East and Persian Gulf (Bertman 2003:4-5).

All types of trade were based on the exploitation of raw materials within and outside of their own domains, leading to the exchange of goods and ideas between societies. Well-organized societies, such as Mesopotamia, could easily develop a strong economic system through this process, while demand and supply among domains could strengthen their politico-economic system.

Mesopotamia had limited access to natural resources due to changing socio-economic conditions (Karlovsky 1997:88). Water and fertile soil were the main natural resources in Mesopotamia (Bertman 2003:4-5), and the control and use of water resources for cultivation purposes was crucial for prosperity. In the early days, humans relied on hunting, fishing, and food gathering, but as the natural food supply decreased, they turned to procuring water and land resources and shifted towards horticulture, utilizing the flow of Euphrates and Tigris rivers. These rivers originate in the highlands of Anatolia, located in eastern Turkey, northern Syria, and northern Iraq, flowing in an uneven, slanting parallel direction across Iraq before finally emptying into the Gulf.

All ancient cities and towns of Mesopotamia were established near the banks of Euphrates and Tigris, as well as tributaries, providing easy access to water for irrigation, transportation, and trade (Gruber 1948:71-79). The rivers brought fertile soil to the southern lands, resulting in very high agricultural production (Somervill 2010:7-8).

The necessities of daily life in ancient Mesopotamia were readily available within the local area, including date palms and various grains, as well as wild and domesticated animals. Animal hides, fur, and fleece were also used to make clothing, while mud and water were used for brick production, clay for manufacturing ceramics, and plain woods and simple stone for construction purposes (Nejat 1998:265).

Southern Mesopotamia was particularly suitable for crop production and gathering an oversupply of natural resources due to consistent and organized irrigation, which compensated for the unpredictable rainfall in other areas of Mesopotamia. The Ur period in Southern Mesopotamia saw abundant resources, such as grain from fertile grasslands, fruits, vegetables, flax, orchards, and great meadows for native animals. The region was also rich in fish, fowl, wild animals, and diverse reed plants, with other products including textiles, wool, wine, and olive oil (Algaze 2008:40-49; Amele 1994: 41).

Pens for writing were made from reeds growing along the banks of rivers, and bitumen and asphalt were found near the Euphrates (Bertman 2003:4-5). Leaves of young reeds were used for animal fodder, primarily obtained from reed plants. The conditions for animal herding were suitable in North Mesopotamia, but the shortage of space was a limiting factor (Algaze 2008:40-49). Mesopotamia in the 3rd millennium BCE also saw the production of objects made of bone, ivory, and shell (Karlovsky 1997:93). Assyrian garments and certain types of cloth were popular during c.1900-1830 BCE (Amele 1994: 94).

The deserts west of the Euphrates served as a platform for pastoral people to maintain animal husbandry, while green hillsides provided an opportunity for small communities to cultivate different crops. The Zagros Mountains produced meadows for summer grazing (Mcintosh 2005:11-14).

Craft production was a significant part of the Mesopotamian economy, with cities being the primary centers of production. The dependence of crafts on cities was threefold, with manufacturers easily acquiring surplus food, raw materials, and customers. Mesopotamian rulers, such as those in Mari, also undertook irrigation work to increase crop production and had major palace industries, such as the production of textiles, run with the active participation of queens (Amele 1994:102). There were eight main crafts based on the material used, including pottery, weaving, leatherwork, reed work, carpentry, stonecutting, and metalwork and jewelry production. While other crafts, such as glassmaking, were present, they did not have as much commercial significance (Nejat 1998:267).

Transportation

Mesopotamian trade flourished mainly based on river transport. The Tigris and Euphrates rivers, which flowed from north to south, were the main transportation routes. The three capitals of Assyria, Ashur, Nineveh, and Nimrud were built along the Tigris, which provided transportation facilities (Nejat 1998:279). River transport was of low cost because of water routes (Somervill 2010:7-8). These advantages led to the development of boats made from reed or wood planks (Algaze 2008:50-51). The versatility of sea transport in ancient Mesopotamia is evident from the discovery of a flat-bottomed clay model of a boat from graves and tombs at Eridu, a sleek rowboat crafted from silver from a royal tomb at Ur, and ships depicted in seals. Barges and ferries were the largest number of boats used, although their number was limited due to the scarcity of timber. Small boats such as coracles and keleks were also used for transport (Bertman 2003:252-53).

The land transport system relied on the wheel, which was invented during these times in southern Mesopotamia and was initially used in carts. Paved roads were very rare, and occasionally they were repaired by the local government (Ibid). Donkeys were used to transport products from state to state, such as from Anatolia to Babylon (Nardo & Kebric 2007:294-297).

Trade Network & Expansion

Mesopotamia has a long history of trade links, dating back to the time of Neolithic man around 6000 BCE (Amele1994:12). The Sumerians were the first agriculturalists in Mesopotamia, arriving from the Zagros Mountains in 6000 BCE. They found wild wheat in the hills and developed irrigation techniques to grow crops like reed (Hunt 2009:8). As crafts became more advanced during the late fourth and early third millennia BCE, there was a growing demand for raw materials like stone, wood, and metals. The Sumerians traded in gold and lapis lazuli from eastern Iran and Afghanistan, and this trade increased with the emergence of Akkadian in Ur during the late third millennium BCE.

Ur was an important city for trade during the second millennium BCE, as it was located near the Persian Gulf. Traders from Ur and other city-states traded with regions like the Indus River in India, the seaboards of the Arabian Peninsula, and the eastern coastline of Africa. Egypt also gained access to these trade routes through the Red Sea. Syria became a major trade route during the mid-second millennium BCE, and trade routes expanded to areas like Anatolia, the Mediterranean island of Cyprus, Greece, and beyond.

While much trade was completed by sea, many goods were also transported by land, using donkeys to carry products from Anatolia to Babylon. The Tigris and Euphrates rivers and their branches were widely used for inland trade (Nardo and Kebric 2007:294-297). Initially, trade between Mesopotamia and the Indus Valley was conducted through land routes, but during the third millennium BCE, direct sea trade began between them (Dani 1981:3-4).

Temples and palaces ran industries and workshops in Mesopotamia, producing goods that were exchanged for imports like timber, spices, stone, metal, and perfumes (Nejat 1998:265).

Mesopotamia, mainly southern Mesopotamia maintained trade with Arab-Persian Gulf. Assyrians managed a long-distance trade in Anatolia during c. 1900-1830 BCE (Amele 1994: 1-2). One royal inscription highlighting Agade functioned as main control zone for sea trade, stated as follows: -

"Sargon…caused the boats of Meluhha(=India), the boats of Magan (Oman), and the boats of Dilmun (Bahrain/Gulf) to dock at the quays of Agade" (Ibid: 53).

The Hammurabi code refers to the restarting of Gulf trade (Roux 1993: 61-62), while Ashur, a city-state with religious and commercial significance, had trading outposts as far as central Anatolia. Kanesh, near Kayseri today, was one of the most important outposts, and Ashur's merchants had certain privileges that allowed them to travel through countries not ruled by the Assyrians but with whom they had mutual agreements (Charpin 1995:813).

The Babylonians were very active in trade throughout the Near East, and seaside trade expanded in the early ninth century B.C. with the rise of the Assyrian empire and the establishment of the Phoenician cities near Syria (Nardo and Kebric 2007:294-297). According to historical evidence from Biblical and Assyrian sources, trade with South Arabia was significant, and products brought from South Arabia included perfumes, gold, and precious stones (Levey 1959:137). The earliest Assyrian evidence of trade with South Arabia is a document from the middle of the eighth century B.C.E. that mentions trade between South Arabia and Hindanu in the Middle Euphrates. However, trade probably began even earlier, between 1075 and 890 B.C.E, as new markets emerged in the Fertile Crescent and attracted South Arabian trade (Sass 2005:118-119).

During the reign of Tiglat-Pileser III, the Assyrians established contact with Arabian tribes to participate in the South Arabian trade. They conquered oases in the Syro-Arabian desert and controlled the import of goods into the empire through taxes and levies. The Assyrian policy allowed Arabian tribes the freedom to trade and secured a portion of the profits. Ezekiel mentions Sheba and Raamah as dealers in perfumes, precious stones, and gold (Levey 1959:137). Throughout the Assyrian re-occupation (911-823), Shalmaneser led a battle counter to Chaldean inhabitants in Babylonia, which controlled significant trade routes, and departed to Assyria with abundant treasure (Charpin 1995:823).

In Ezekiel's prophecy, a detailed list of the various states and imports connected to Tyre's commercial activity can be found. Rare references to sources of lapis in Iranian Mazanderan, Kerman, and Azerbaijan date from the Achaemenid period to more recent times. The commodities catalog in the prophecy lists a variety of goods, including metals, animals, ivory, precious woods, textiles, agricultural produce, perfumes, precious stones, and gold,

arranged geographically by nation. One of the geographic areas mentioned in prophecy includes the parts of northern Syria that are known for their animal trade, and Assyria's typical goods are primarily different textiles (Levey 1959:131).

Fig No 1: An Assyrian Relief showing Row of Boats (After Failla 2006:20).

Imports and Exports

Imports to southern Mesopotamia were partially used in the local economy and partially exported. Resins and other tree and plant produce were imported from the northwest and re-exported to regions east of the Tigris, potentially including Dilmun. Babylon re-exported tin to northwestern countries. Some evidence suggests that goods imported from the south were re-exported to the north, such as Meluhha's wood being used in Eshnunna and ivory appearing in a treasury at Iagaba and being used in Eshnunna. However, there is scarce evidence of re-export trade between Babylon and Larsa. Using native produce to pay for imports may have been more profitable, and there are indications that this was partly possible in the Dilmun trade (Leemans 1960). Detail is given as follows: -

Agricultural Products

The soil was fertile enough, according to texts, to produce barley eighty-six times more than the sowing during third millennium BCE. Sumerians grow

grains and dates as well (Gruber 1948:72-74). Mesopotamia exported its own products such as grain, sesame seeds, dates, textiles, garments (Nardo & Kerik 2007:294-297). Southern Mesopotamia imported vegetables from northern Mesopotamia (Karlovskey 1997:89). Mesopotamia began importing linen fabric at the beginning of the first millennium BCE (Levey 1959:135).

Animal and Animal Products

The earliest archaeological evidence for Neolithic animal husbandry (sheep and goats) comes from Tell el Ouelli, southern Mesopotamia. Pastoral production produces extra animals to supply stable populations with dairy products, meat, hair, and wool for excess agrarian yield (McCorriston 1997:526). In addition, leather goods were also produced (Nardo & Kebric 2007:294-297).

The term "wool sheep" can be easily identified in these ancient Sumerian documents with the help of lexical lists that have survived from later periods (Uruk onward) (Green 1981:4). The management approach chosen to maximize the yields of meat, milk, wool, and hair or a combination of these products affects the structure of the herd (McCorriston 1997:521).

Southern Mesopotamia imported animals from north Mesopotamia (Karlovskey 1997:89), but Sumerians themselves also kept sheep and goats during the third millennium BCE (Gruber 1948:74). With the routes into the Zagros and Iran firmly in their grip, the Kassites were probably able to procure fine horses from the Iranian mountains. Formal gifts from Babylonia (Kassite Babylonia c.1595) to Egypt included teams of horses and chariots. According to sources, Tiglath-Pileser I (1114-1076) was able to manage large herds of horses, oxen, and asses. In addition, he had managed large herds of nayalu deer, ayalu deer, gazelles, ibex as well (Ibid: 343-359). Leather goods are also reported from historical periods (Nardo & Kebric 2007:294-297).

Perfumes

Perfumes were also traded in the last phases of Mesopotamian history i.e., after 900 BCE (Levey 1959:137).

Pottery

Mesopotamia exported pottery to Arabian Peninsula during Ubaid. Later, with a little doubt, Mesopotamia was also exporting pottery to the Gulf as well (Karlovsky 1997:94). Pottery was also imported from Cyprus and Greece (Nardo & Kebric 2007:294-297).

Stones

Except for limestone and its varieties, i.e., gypsum and calcite, southern Mesopotamia is mostly without stones. The dolerite, diorite, schist, serpentine, steatite/chlorite, and olivine-gabbros stones used in Sumer for sculpture, cylinder seals, door sockets, vessels, and other objects had to be traded in from

other states. These stones are found in mountains from Oman to the Gulf in the southeast, the Zagros Mountains in the northeast, and the mountains bordering Mesopotamia and Anatolia in the northwest zone. An extensive variety of exotic stones, particularly chalcedonies and colored marbles, agates, were imported (Potts 1993:383).

South Mesopotamia imported minerals from northern Mesopotamia and Anatolia, the Gulf (Dilmun and Magan), the Iranian Plateau, and the distant Indus Valley (Meluhha). During the Uruk III-IV periods, imported stones were used in temples for tiles, sculptures, and vessels production. Serpentine for the manufacture of seals was imported from Syria (Karlovskey 1997:89). The Uruk trade declined at the end of the Late Uruk (Eanna IV) period, about 3200 BCE. A considerable range of stones continued to be imported during the time of the upcoming Sumerians of Jemdet Nasr and Early Dynastic periods. Their mechanism of trade was more advanced, and they were directly involved in the extraction and procurement processes of resources (Potts 1993:383-384). A significant mass of stones, precious resources for the construction of buildings and tiles, was also imported from Afar during the third millennium BCE (Amele 1994:25). Mesopotamia imported complete soapstone containers from Kirman, eastern Iran (Ibid: 2). Naram-Sin (c. 2254-2218 BCE) successor of Manishtushu and Sumerian ruler Gudea quarried stones in the Gulf (Magan= modern Oman) (Potts 1993:386).

Sargon's son, Manishtushu (c. 2269-2255 BCE), after beating the Elamites of Sherihum and Anshan, traversed the Arabian Gulf and quarried dark stones and shipped them back to Agade. After that, these stones were transformed into sculptures (Ibid).

It is mentioned in inscription that: -

"Manishtush, king of Kish, when he conquered Anshan and Sherihum, caused the Lower Sea to be crossed in boats…From the mountains beyond the Lower Sea he extracted black stones; he loaded(them) onto boats and had dock at the quay of Agade" (Amele 1994: 53).

The southern region of Mesopotamia, except for limestone and its related minerals such as gypsum and calcite, is largely devoid of stone. Therefore, Sumer had to import dolerite, diorite, schist, serpentine, steatite/chlorite, and olivine-gabbros from other regions for use in their sculpture, cylinder seals, door sockets, vessels, and other works. These stones were found in the southeast Zagros Mountains from Oman to the Gulf, and in the mountains bordering Mesopotamia and Anatolia in the northwest zone. Sumer also imported a wide range of exotic stones, such as chalcedonies, colored marbles, and agates, particularly from other regions such as northern Mesopotamia and Anatolia, the Gulf (Dilmun and Magan), the Iranian Plateau, and the distant Indus Valley (Meluhha) (Potts 1993:383).

During the Uruk III-IV periods, imported stones were used in temples for tile production, sculpture, and vessel creation. Serpentine for seal manufacturing was imported from Syria, and the trade of Uruk began to decline at the end of

the Late Uruk (Eanna IV) period around 3200 BCE. However, during the Jemdet Nasr and Early Dynastic periods, Sumerians continued to import a considerable range of stones, and their mechanism of trade was more advanced as they were directly involved in the extraction and procurement processes of resources (Potts 1993:383-384). Significant masses of stones, precious resources for the construction of buildings and tiles, were also imported from Afar during the third millennium BCE (Amele 1994: 25).

Dark stones such as gabbros, dolerites, and diorites were also imported from the Gulf, primarily for use in creating items for rulers and high-ranking officials during the end of Early Dynastic II, Akkadian, and Ur III periods. Chlorite used for seal manufacturing was imported from eastern Iran and the Gulf during the post-Akkadian and Ur III periods (Karlovsky 1997:89). Although locally available limestone and calcite were used to produce many Early Dynastic votive statues and other different stonework in Sumer and Akkad, following the Early Dynastic III period, banded yellow-white calcite stone began to replace the dark stones for the manufacture of tomb vessels. Etched, heat-treated carnelian beads were imported from the Indus Valley, as well as locally worked at Larsa and Uruk. Cuneiform records from the third millennium onwards provide evidence that the Sumerians procured carnelian from the eastern region, particularly from Meluhha, which refers to the area of the Harappan civilization (Potts 1993:386-89).

Mesopotamia also imported lapis lazuli from Badakhshan, Afghanistan (Amele 1994: 2). Based on Mesopotamian texts, it appears that lapis lazuli was primarily obtained from Meluhha, with trade being carried out via boat along the Gulf. Hammurabi oversaw the routes used to trade precious lapis lazuli and carnelian (Amele 1994: 109). Precious stones were also traded during the last phases of Mesopotamian history, i.e., after 900 BCE (Levey 1959:147).

Seals

Shell was available in mass throughout Mesopotamia. During the 3rd millennium BCE shell seals were produced in Mesopotamia. During the late third and early second millennium BCE, Mesopotamian seals made from the shell of conidia species, found in Gulf and the Indian Ocean, were excavated from the cemeteries in United Arab Emirates and the Bahrain (Karlovsky 1997:93).

Metals

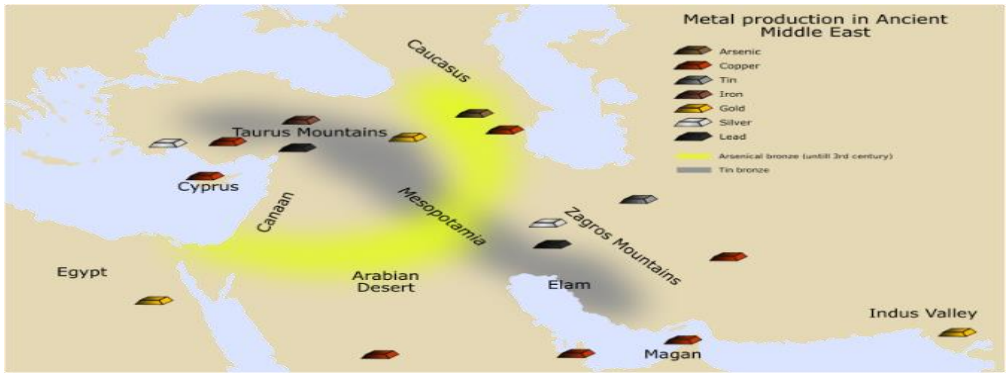
Sumer relied entirely on external resources for its supply of metals, which were crucial for urban life, including the production of tools, weapons, utensils, sculpture, and jewelry-making. There were no local sources of metals in the city-state. The origin of these metals in Mesopotamia is supported by textual references and source provenance evidence (Potts 1993:390). According to historical records, Hammurabi controlled the routes along which precious metals such as silver, gold, tin, and copper were traded (Amele 1994:109).

Copper was a crucial trade commodity in ancient times. It was imported from Arabia, the eastern African shore, as well as from Susa and highland Iran during the late fourth to mid-third millennia (Nardo & Kebric 2007:294-297). Copper was supplied to the Hamrin sites in northern Akkad during Early Dynastic I from the mines of Anarak-Talmessi and Bardsir-Sheikh Ali in Iran. In ancient times, arsenic was commonly used to harden copper in Mesopotamia and Iran, and it was available from the Near Eastern source Anara Top of Form.

Tin was imported from Iran and traded via caravans from Ashur to Cappadocia, according to historical records. Following that, it was traded at Susa and Shemsharra. Western Afghanistan is where the first verified report of a potential tin source comes from (Nardo & Kebric 2007:294-297). Although tin bronze was occasionally used in Mesopotamia in the late fourth millennium, Mari was the main tin supplier in the region (Amele 1994:101).

Silver was mostly found in the nearby and rich Taurus Mountains in the second millennium. However, there is no proof that silver was obtained from the 'silver mountain' near the Mediterranean Sea mentioned by Sargon in the third millennium. Some documents suggest that silver was obtained from highland Iran, as well as Dilmun and Meluhha along the Gulf during that time (Potts 1993:92).

Gold was imported from Egypt, India, Arabia, and the eastern African shore (Nardo & Kebric, 2007:294-297). The east was Mesopotamia's primary source of gold. Lexical and literary records refer to Meluhha, as well as other Iranian gold sources. However, only Meluhha has been verified by historical documents like the Gudea inscriptions. A text from the fourth king of the Ur III dynasty, Shu-Sin, suggests that gold and silver were mined in Mardin and Habur, indicating that some gold may have also come from Anatolia. In the second millennium, northern mines became the primary source of Mesopotamian gold, although some may have still arrived via Dilmun. Gold was also traded during the last phases of Mesopotamian history, after 900 BCE (Levey 1959:147).



Map No.2: Metal Resources in Mesopotamia and Neighbouring Regions[4].

[4] https://www.worldhistory.org/uploads/images/350.png?v=1646990705

Finished Metal Work

Potts (1993:393) notes that only a few decorated Iranian and Bactrian axes found in southern Mesopotamia can be considered Iranian imports. However, Sargonic and Ur III royal inscriptions indicate that Mesopotamia acquired a significant amount of metalwork as loot from Elam and other parts of Iran. These objects are not found today because they were often melted down and reused.

Wood

Ebony wood was obtained through African coast for construction purposes. Syria and Palestine had provided timber, cedar to Mesopotamia (Nardo &Kebric 2007:294-297). Timber was transported from the Zagros Mountains and Lebanon (Bertman 2003:4-5). One of the inscriptions from the state of Lagash c. 2500 BCE, stated as: -

"The boats of Dilmun (region of Bahrain), from (this distant) land brought the wood (for Ur-nashe, king of Lagash, son Gunidu, son of (the town), Gursar)" (Amele 1994: 34).

Textual record also talks about the import of timber from far up the Euphrates land by ruler Gudea (Ibid: 58).

Furniture and Oil

From Egypt, when Kadashman-Enlil I completed a palace, Amenophis III sent him handsomely carved furniture made of ebony, sheathed in-gold, some of it inlaid with ivory; the list of items from Egypt includes a bed, a sedan-chair, a large arm chair, nine other arm chairs and foot stools (Amele 1994: 343). Syria and Palestine had provided aromatic oils to Mesopotamia (Nardo & Kebric 2007:294-297).

Transaction, Standards/Indices

Development based on the import of raw materials and the export of value-added productions, needs a process of transforming labour into commodities (Amele 1994:31). Precious metals i.e., gold, silver used as source of exchange during 6000-2900 BCE. The transaction system was not only barter. According to Powel, he argues that: -

"Metal coils (of gold, silver, bronze and copper) of standard weights were produced as a way of storing metals, from which pieces could be cut and weight in order to provide currency for exchange; or items could be manufactured from such units by smelting".

The Ur III period is a good example of such a system (Powell 1996:61). Textiles and agricultural products were also used to exchange goods in the earlier Uruk culture (McCorriston 1997:519). Coins were not discovered in

ancient Mesopotamia, except during the Achaemenid period. In the last century, H. Rassam discovered a coin horde at Babylon containing Greek, Phoenician, and Persian coins, as well as broken silver, which was placed on the weighing scale pan along with the coins during money transactions (Ibid:230).

Narrative sources for Mesopotamian money transactions are scarce but mainly concerned with "weighty" matters such as minas and shekels. Minas and shekels were financial terms in ancient Mesopotamia, mainly weight-metrological terms. Mesopotamian monies were often exchanged as payment for tangible commodities and sometimes intangible things like exemptions from various taxes, loans with interest, and fines. Money was also used as indices or standards of value and was stored. Barley and silver were used as standards of value and monies, as revealed in texts from approximately all periods and regions (Ibid:225-230).

Materials that functioned as money in Mesopotamia can be arranged in ascending order of value, with barley, lead, and copper or bronze as cheaper monies, tin as mid-range, and silver and gold as high-range monies (Ibid). However, other items such as cows, sheep, asses, slaves, and household utensils occasionally had a monetary function as well. Silver and barley were commonly used as common denominators for value. Gold, although rare, was commonly used as money in later Assyria (Potts 1993:230). During the Babylonian period, the state's authoritative role in long-distance trade possibly made gold an alternative standard for commercial dealings instead of silver during the Kassite period (Amele 1994:343).

The other types of money were "ring" silver (Powell 1996:236-237), “cakes” or “loaves”. Two more types were cups and jewelry, and occasionally these two are contrasted with plain “silver” (Powell 1996:238). The goods were converted into silver and sent back to Ashur. In winter, due to climatic disturbances in Anatolia, Ashur merchants did not get enough time to convert goods into silver. As a result, cash sales became limited and merchants moved to other Anatolian markets to do indirect sales, i.e., tin/textiles sold for copper, which was sold again for silver and sent back to Ashur before winter (Veenhof 1997:347).

There is a good number of cuneiform inscriptions in the Ur III period (2112-2004 BCE) which describe the diversity of commodities and products, along with their silver values or equivalences (Widell 2005:138).

The gifts that accompanied each embassy were meticulously itemized, together with the net weights of any valuable materials, as a guarantee of their weight and value. An amusing reference to this procedure is contained in an Amarna letter from Burnaburiash to Akhenaten (Ibid:344).The contents of the Babylonian store were simple, and prices were even given, as in the opening section of the Laws of Eshnunna.

- For one shekel, one gur barley (300 liters) (8 g) silver
- 1 shekel silver and 3 liters of the best oil

- Vegetable oil, 1.2 liters, for a shekel of silver.
- 1.5 liters of pig fat for one silver shekel.
- One silver shekel equals 40 liters of bitumen.
- 6 minas (3 kg) silver for one shekel of wool
- 1 shekel silver for 2 gur salt.
- 1 gur of potash for 1 shekel of silver.
- 1 shekel silver for 3 minas copper
- For a silver shekel, two miners worked copper (Nejat 1998:263-64).

During the Ur III era, two distinct economic systems with different exchange mechanisms coexisted. The first was the local exchange system, which was primarily used for one-on-one barter transactions and took place at set times and locations. Through this system, common people were able to acquire various necessities of life that the temple and palace households did not offer. In this system, silver was not frequently used; rather, it was reserved for significant sales of land, livestock, or people, as well as for extensive trade in goods. The official silver equivalents and the actual prices of goods and commodities on the local exchange correlated with one another. However, the bartering values in the local exchange were unaffected by minor alterations and fluctuations in the large-scale exchange system (Widell 2005:138).

Legal Features

The trade in ancient Mesopotamia was made possible with the aid of various individuals, such as investors, moneylenders, guarantors, traders, partners, representative travel agents, caravan leaders, and employees. These individuals were subject to legal frameworks that are depicted in contracts, judicial records, and commercial texts. The development of legal rules for trade was inspired by existing customary and elementary contractual rules for creditors and debtors in primitive societies. However, the law collections of Mesopotamia preceding Hammurabi did not contain rules on trade. Hammurabi's Laws, which date back to approximately 1760 B.C., addressed the relationship between creditor and debtor, and overland traders. The code contains rules on the division of profits or losses in a commercial partnership, as well as rules regarding the relation and settlement of accounts between a capitalist trade and their travelling agent or tractator (Veenhof 1997:343-44).

Tax System

There was a tax system, as attested from remains in Nippur, Puzrish-Dagan, during Ur III period i.e., “gunmda”, tax of provinces, paid by military officials in the shape of animals, but Hammurabi code narrates that tax system was properly introduced in his era. Old Assyrian texts state that paying tax on exports to all the type of trade was included in commercial policy of city Ashur.In addition, Assyrian merchants were also obliged to pay taxes in foreign lands as well like Anatolia (c. 1900-1830). During the time of Mari (c. 1830-1760), tolls, boat taxes and charges were claimed in return for land grants. During the rule of Ammi-saduqa (1647-1626), royal land was cultivated by people who paid an annual tax (biltum), partly in agricultural products or goods and partly in silver (Amele 1994: 61-110).

A significant text precisely related to the Kassites is the kudurru. They are stones of four-sided or phallic shape, typically with unequally curved tips adorned with sacred signs. The sides generally encompass writing, which deals with numerous matters; one is related to exemptions from dues and taxes to officers for distinguished services (Ibid: 337). Assyrian records show that birmu were among the goods and taxes brought into Assyria from the areas located to the west of the Euphrates River (Levey 1959:136).

Trade Control

The temple was anticipated to remain as the socio-economic center and ruler in the form of a Priest King (Amele 1994: 25). The religious and economic harmony was not limited to the temples, but also extended to granaries, magazines, and workshops (Gruber 1948:76). The supreme rulers of each city had control over resources such as exotic items, specialized crafts, land, and precious materials through trade. During the 3rd millennium BCE, the king of the city, along with several elders, controlled most of the resources in agriculture and precious metals (Amele 1994: 26-41). In some city-states during the early dynastic period (2900-2350), the gods were considered the only landowners, as in Lagash. The economy was managed by the king through large domains connected to the temples of the city's main deities. This type of city-state is known as a "temple state," as described by Charpin (1995:809).

Literary sources from the palace remains at Mari during c.1810-1760 indicate a palace-centered economy, with the palace actively participating in trade. Hammurabi also re-established centralized royal control over production and trade (Amele 1994:102-109). Based on ethnographic studies, collective control of important resources by corporate groups in ancient Mesopotamia may have existed, and these studies also indicate strong associations between these groups and landowners (McCorriston 1997:531).

Management and Mechanism

The organization of international trade during ancient Mesopotamia is not clearly documented in literary sources, according to Amele (1994:31). However, trade occurred between cities, trading outposts, and even with barbarian tribes. Overseas trade mainly took place near the Persian Gulf and along the Euphrates route to the Mediterranean shoreline (Nejat 1998:265).

During the U III period, there was a legal system for the sale and purchase of goods, with sales forms recording goods sold by slaves. The Old Assyrian King, Ilushuma (c. 1932 BCE), offered certain privileges to traders from southern Mesopotamia to attract them to Ashur. His successor, Erishum (1939-1900 BCE), granted tax exemptions to maximize their position in profitable trade. In the early second millennium BCE, trade was largely conducted by family-based Assyrian merchant houses, and it was a crucial feature of Assyrian trade in Anatolia. Ashur merchants sent their male relatives to Anatolia, where they carried out the family trading business by

selling shipments of goods and transferring profits back home. Assyrian merchants kept a close watch on market trends and took control of internal trade, resulting in significant profits. During the first dynasty of Babylon (c. 1894-1595), married daughters of high-ranking families were actively involved in business and used outside agents (Amele 1994: 31-115). Diplomatic gifts were also exchanged to promote trade (ibid: 104). Kassite monarchs sent gifts such as horses, chariots, and lapis lazuli to the Egyptian pharaohs (Charpin 1995:819).

Independent merchants were also there Ur III period (Amele 1994: 61), Isin-Larsa and Old Babylonian periods (Ibid: 104). The caravans of donkeys by which the goods were transported on the five- to six-week journey were generally small, donkeys were also sold along the goods (Ibid: 94).

International trade was completed through the sea but then again much of it was completed by means of land routes. The Tigris and Euphrates rivers and their branches remained at large in use for inland trade (Nardo &Kebric 2007:294-297). Presence of inter-city trade is confirmed with presence inscribed city names on seals of ED I period (Amele 1994: 40).

According to historical documents, two different types of trading establishments existed in Anatolia during ancient times. The first and more well-known type was the karum, which originally referred to a quay but eventually came to mean the harbor and trading quarter of a city. This was where merchants gathered to conduct their business. The second type of trading center was known as the wabartum, which is believed to have originally referred to a caravanserai but later evolved into a more permanent residential and trading center. However, these centers were typically smaller and less independent than the karum (Ibid: 92).

Trade Collapse

During the fifth and fourth millennium BCE, Ubaid, Uruk, and Halaf were the main resource acquisition centers from the east as far as Afghanistan. The main resources they acquired were stones. During the Sumerian time, in the fourth millennium BCE, the trade mechanism modified and composed of traders, trade enclaves, and resource acquisition turned towards Anatolia in the north, Iran in the east, Egypt in the south, and Syria in the west. At the end of the fourth millennium BCE, Sumer had economized due to internal and external conflicts related to the rise of Elam and expansion of Trans-Caucasian groups. Intercessors took control over resource centers and caused the Sumer to re-establish trade to the east, i.e., Gulf through Dilmun, Oman, and the Indus land (Thomson 2004:629). There was a shortage of grain source during the decline of Ur III period along with rising prices and disturbance of pastoralists in communication routes.

At the end of the second millennium BCE, militarism, decline of agricultural products, and the fall of the Indus Civilization caused Mesopotamian cities to re-orient themselves for trade purposes. Hence, ways towards west countries i.e., Greece, Italy, and beyond started to open, which ultimately caused the

complete fall of the Indus Civilization. Besides this, the Hyksos invasion of Egypt also played a significant role at this time. About 1200 BCE, the trade system badly collapsed (Thomson 2004:629-31). Pressure of foreign invasions and internal conflicts resulted in the decline of the old Babylonian Empire. Henceforth, state incomes were reduced, and the commercial conditions worsened (Charpin 1995:817).

According to Amele, water supply was diverted towards Larsa during the reign of Abisare (1905-1895 BCE), and Sumu-el (1894-1866 BCE) of Larsa, due to which the Gulf trade, mainly based on agricultural products, weakened. In addition, soon after Hammurabi's demise, an opponent rule (Kassite Babylonia (1595-1155 BCE)) of the sealand emerged. It controlled the marshy area and seaside of the extreme south of Iraq, consequently hindering trade-links among the area to the north and the Gulf, through which the profitable trade with south Arabia and the Indus valley had been conducting previously. During the period of Elam (c.1450-c.1100 BCE), clashes arose in Der, an area repeatedly disputed among Elamites, Babylonians, and Assyrians, because it was the nodal point of the route which was crucial, both from strategic and commercial point of view (Amele 1994:31-115).

CONCLUSION

The emergence and growth of Mesopotamian trade can be attributed to several factors, including the fertile hill sides, friendly rivers, well-organized society, geographical elements, and diplomatic relations. Archaeological evidence indicates that decreased natural food supply stimulated agriculture and animal husbandry in ancient Mesopotamia, with fertile hill sides providing wild grains in the first phase. However, the surplus production of agricultural and animal products was not enough to meet food needs, and the presence of accessible rivers and fertile lands led to surplus production.

The land routes were unfriendly, but the presence of rivers all along the remains of ancient Mesopotamia made river transport cheap and easy. The possibility of trade only in the north to south direction made the use of land for trade compulsory, resulting in the development of a complex and organized trade system. The system progressed over time, with legal features developing in a strict manner, as evidenced by the Laws of Eshnunna and Hammurabi.

Archaeological findings reveal that Mesopotamia imported several items from other states, and they were not fully used but manufactured and exported outside to gain excess money. This indicates the presence of well-established and developed craft industries in Mesopotamia.

In the beginning, the trade was based on a barter system, mainly using surplus agricultural goods as a means of transaction. Every excess yield and craft were used to exchange goods. During the third millennium BCE, metal monies in the form of silver and later gold were introduced. Proper coins with legends were not used at that time.

Control and authority are essential for trade, and in Mesopotamia, control was initially in the hands of its producers. With the development and reforms in

political and religious aspects, control started to be divided among rulers and merchants. It is not certain whether trade was entirely controlled by religion or by merchants and rulers. Research suggests that rulers were controlling resources and protecting trade routes, indicating that the temple alone was not controlling trade.

The decline of Mesopotamian trade coincides with the fall of the empire in the historic period. Certain periods, such as the third millennium BCE, were marked by peak trade, while other periods saw contraction, such as the second half of the fourth and second millennium BCE. Several elements, such as low agrarian yield, price fluctuation, river floods and change of courses, internal and external conflicts, hinterland issues, soil salinity, and diversion of canals and unavailability of water, affected trade, but it continued until the fall of the empire to the Achaemenians in c. 539 BCE.

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