

The Economic Conditions of the Eastern Anatolian Highland (Armenia Satrapy) during the Achaemenid Period

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A Glance on the Economic Structure in the Achaemenid Period

In the middle of sixth BC, the second Cyrus (the great) conquered a kingdom from Mede, Lydia, Babylonia, and the western Iranian plateau to the Mediterranean shore and also the eastern Iranian plateau in less than twenty years (550–530 BC). His successor, Cambyses, added Egypt to the kingdom in 525 BC. Later, in 518 BC, Darius conquered the India through the Indus riverbank and in 513 BC, paraded to the Scythia and subjugated the Aegean lands. Therefore, the development and expansion of the empire including the Oxus and Indus banks in the east to the Aegean and Mediterranean shore in the west, and from the Aral (Khwarazm) lake in the north to the Persian Gulf in the south was accomplished (fig. 1).¹ This extensive domain was consisted of the

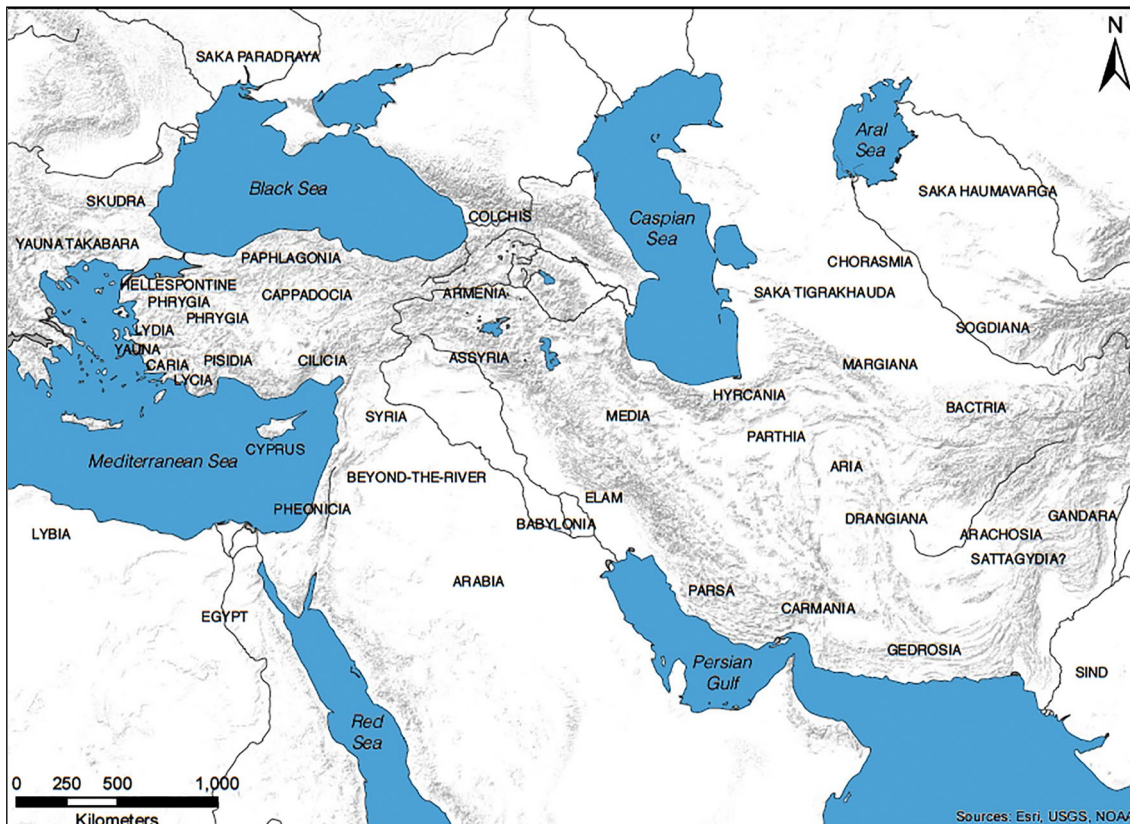


Fig. 1: The Achaemenid Empire.

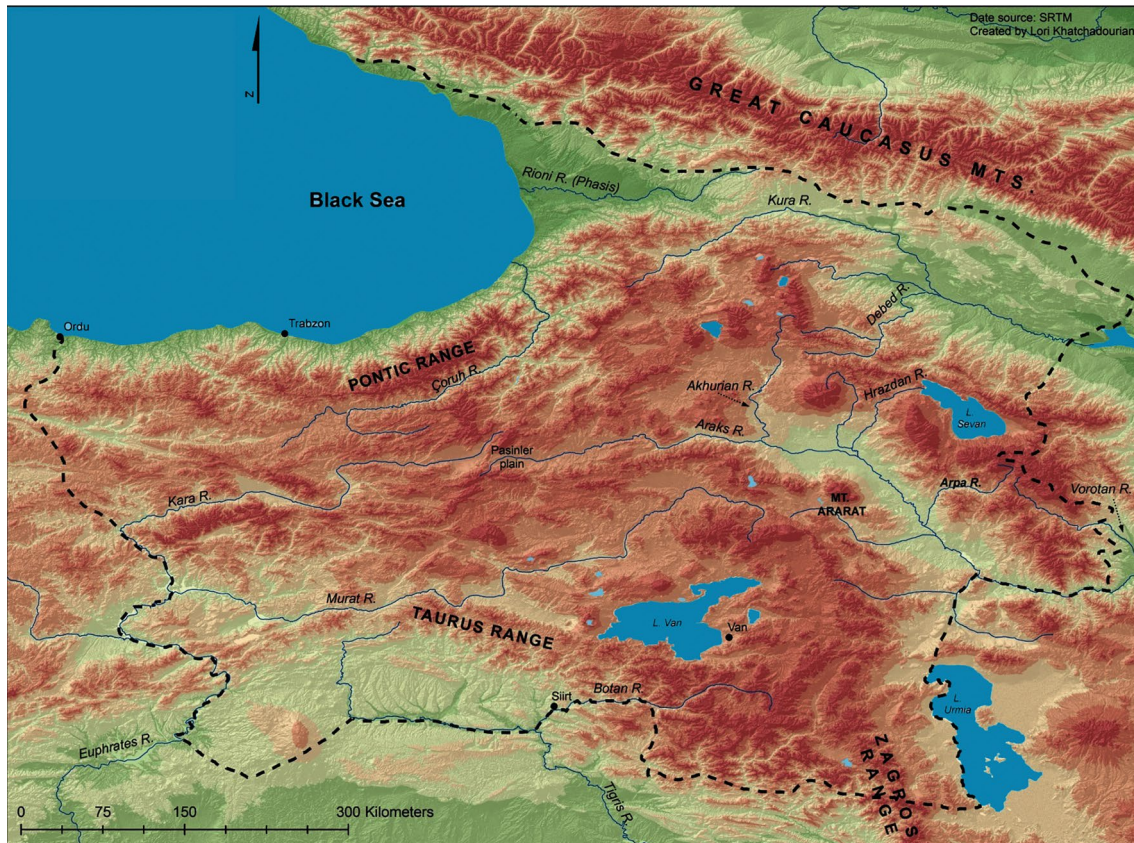


Fig. 2: Map of the highlands showing the borders of the “Main Satrapy Armenia”.

different and various political-economical units. There are many Iranian names in the political-economical documents in other languages other than Old Persian to prove the point.² It can be said, about the economic structure of the Achaemenid Empire, as the political structure, it likely had some variety. Perhaps, it was a combination of different economies and, at the same time, an organized economic unit at the Achaemenid kings' disposal, who never forgot about the task of uniting this own political-economic unit. In the Achaemenid Empire there were various economic spheres combined. They rarely intervened in the economic and social life of their satraps. However, they provided the required military support and new opportunities for the development of economic relations and the exchange of their goods. The foundation of wealth in the Achaemenian Empire, and especially among the western satraps, were agriculture lands.³ The Achaemenid Empire flourished due to the effective use of local elites and pre-existing institutions in each satrapy. Such was the case in Armenia, where the Achaemenid rulers used the former structures inherited from the kings of Urartu to serve Achaemenid imperial purpose.⁴ Various sources suggest that the Achaemenid economic policy was based on encouraging more production, providing the necessary arrangements for the distribution and exchange of various goods and products among the satrapies and the

economic freedom of these nations. The Achaemenid Empire did a lot of work within the satrapies to make them thrive in agriculture. Public works, especially the creation of irrigation canals, and so on, were used to flourish agriculture, and all this led to a rise in production in some countries and it brought about commercial prosperity in satrapies such as Armenia. During the Achaemenid rule, favorable and good conditions for the expansion of international trade were provided.⁵

Geographical Situation of the Satrapy of Armenia

The satrapy of Armenia is one of the more remote satrapies of the empire, stretching in the west from eastern Anatolia to the southern Caucasus Mountains and in the south to Lake Urmia. It is located quite a distance away from the center of the empire in Pars and creates the northernmost border of the empire in the southern Caucasus Mountains. Armenia has several natural borders such as the Black Sea to its northwest and the great Caucasus range to the north, the satrapy has a varied geography, containing mountains, plains, grasslands, semi-deserts, large lakes and several rivers and streams (fig. 2). The landscape is harsh and as a result the population was resilient. While the landscape was rough, it could also be plentiful: the numerous rivers and streams in the region left raw materials, especially metals such as copper, silver and iron.⁶

Role of the Satrapy of Armenia in the Economic System of the Achaemenid Empire

Land Transportation – Royal Road

The Persian Empire conquered lands that covered over 3.28 million square miles. So this Empire, as a superpower in the ancient world, needed a regular and efficient transportation system for the transmission of news, correspondence and messages, troops and relations with nations. Road construction in ancient times was based on military and governmental goals to facilitate the domination by the central government and the process of administrative affairs. In the aforementioned era, the cobblestone was developed as one of the road-building methods. The motifs carved on tablets and inscriptions confirm that vehicles, especially chariots and carts, were an integral part of people's lives.⁷ In the Achaemenid period, trade, both within the empire and outside of it, developed on a scale previously unknown. It is evident that overland trade was being carried out using caravans. The Persians established an advanced road system. The Persians Royal Road, which was among the most important ones, perhaps the major one. It was probably established on a transportation network remaining from the Assyrian period. As the Persians expanded their area of domination towards the west, the part of the road network situated to the west of the Kızılırmak must have



Fig. 3: The Persian Royal Road.

been restored. Although there is no precise evidence, the construction of the Royal Road, which connected the east to the west, by fixing the stopovers on the road, must have begun during the reign of the Persian king Cyrus. The construction must have been completed during the period of Darius, when the satrapies were reorganized. Susa, which was the capital during the period of Darius, was thus connected to the old Lydian capital Sardis by a 2500 km long road. In addition to Susa, Persepolis was another city where western products would enter and where market traffic was heavy. There were stations every 25–30 km for the caravans to rest. The road, which was not only used for the transportation of people between east and west, but also for military and trade purposes, was referred to by Herodotus as the “Royal Road” (fig. 3).⁸ According to Herodotus, part of the Royal Road passes through the Armenian Satrapy:

“In Armenia the resting places are 15 in number, and the distance is 56 1/2 parasangs. There is one place where a guard is posted. Four large streams intersect this district, all of which have to be crossed by means of boats. The first of these is the Tigris;...”⁹

Part of the Royal Road that crossed Armenia was probably in the plain of Xarberd and near the present day Melitene. In any case, the crossing of the Royal Road increased the value and strategic importance of Armenia and Cappadocia. In the Achaemenid period, the Royal Road had a very favorable and undeniable effect on the economic development of southwestern Armenia.¹⁰



Fig. 4: Armenian delegation on the eastern stairway of the Apadana at Persepolis.

The Role of the Armenian Satrapy in Tax Payment

In the satrap system of the Achaemenian Empire, the tax, which each satrap had to pay annually, was determined. During this period, the economic resources of people were taken into account, so that they could pay their annual tax and this was an important issue.¹¹ During the Achaemenian period, the most important part of these taxes included precious metals, agricultural products and livestock.¹²

There were two types of taxes taken from the satraps in the tax system of the Achaemenes. One was the tax calculated based on silver and was collected annually. The other was the tax collected based on agricultural and livestock products such as wheat, oats, horses and sheep. At the geographical kingdom of the Achaemenes, nearly all the satraps offered precious and different gifts to the king in addition to the annual tax in order to have good political relationship with the capital. Offering gifts was also done for another purpose. The satraps did it to have the support of the king. It also may mean that the Achaemenes kings always had dominance over their satraps.¹³

The Satrapy of Armenia was one of the main capital and financial sources of the Achaemenes Empire due to having natural resources such as mines, fertile soil and



Fig. 5: Erebuni Site.

permanent rivers.¹⁴ Herodotus records Armenia's tribute obligation as 400 talents of silver,¹⁵ while Xenophon¹⁶ and Strabo¹⁷ further attest payment in the form of horses. Xenophon states that the horse tax was differentially distributed according to a quota system across the villages of the *dahyu*. The village Xenophon visited had to supply 17 colts each year to local leaders, who transferred them to the satrap. The satrap would in turn pass them over to the court. Strabo notes that the *dahyu* supplied the king with 20,000 foals each year, which would be sacrificed in a festival to honor the god Mithra.¹⁸ In addition to what was mentioned above, whenever the Achaemenes king passed Armenia, people offered him precious gifts.¹⁹ The Apadana relief at Persepolis vividly represents this seemingly consensual inflow of silver vessels as no mere obligatory payment of debts but a spectacle glorifying sovereignty itself (fig. 4).²⁰ Furthermore, in 1968, in the course of construction activities at the foothill of Erebuni, located in the eastern highlands, about 450 km east of Altintepe (fig. 5),²¹ workers made on an astounding discovery: a hoard of five silver vessels, *deliberately flattened*, and inserted into a "big jug" (fig. 6).²² They provide further evidence for the close association between Armenia and horses. Indeed, if the testimony of the Greek written sources is taken at face value, the horse rhtya from Erebuni would seem to symbolically unite into single objects, the *dahyu*'s twin tributary obligations of silver and horses.²³ Babken Arakelyan, the first to publish the Erebuni hoard, suggested that the vessels were flattened and stuffed into the ceramic jar in haste, in a moment of crisis—an impending raid, perhaps, in the heady closing years of



1



2



3



4

Fig. 6: Erebuni silver vessels , shown at comparable scale. 1. Horse-with-rider rhyton; 2. horse rhyton; 3. calf-head rhyton; 4. goblet rhyton.

the empire. Lori Khatchadourian also says, during one crisis, silver jewelry is likely to be placed inside this jug. It is also said that the flattened condition of the vessels (given what is known of hacksilver) suggests being less a scramble to sequester than the deliberate removal of silver from contexts of consumption and its forced entry into a new phase as monetary instruments. In any case, this much is clear: the vessels' silver properties thrust users at Erebuni into the same dependencies, material flows, and regulatory mechanisms that bound imperial agents elsewhere. The privileged actors of the Armenian highland who may have acquired and used

these vessels, were ensnarled in regimes of value that shaped the Achaemenid economy and were based in large measure on the affordances of silver.²⁴ The vessels from the highland helped make the multidirectional silver flows that powered the material and symbolic economy of the empire possible. They imbricated their users in the cycles of tribute, gifting, royal redistribution, and imperial dependency on silver that materially reproduced the Achaemenid Empire. Many have argued for the abundance of argentiferous lead ores in Anatolia and in Armenia, suggesting that these regions may have been major sources for Achaemenid silver production. Most scholars conjecture that the Erebuni vessels were produced of these regions, usually offering more localized points of manufacture within that expanse, but strong evidence is in most cases not available.²⁵

The Role of the Satrapy of Armenia in Agriculture and Animal Husbandry of Achaemenid Period

The Armenian Satrap also had a significant impact on the economy of the Achaemenid period, in terms of animal husbandry and agriculture. Herodotus believes that the presence of fertile pasture in Armenia has led to the cultivation of a number of livestock, among them breeding horses and camels had particular importance.²⁶ The signs of animal husbandry and agriculture in Armenia can be found in the findings from the excavation of Tsaghkahovit site.

The Tsaghkahovit Plain is a small, high-elevation plateau bounded on the south by Mount Aragats (4,090 masl), on the northeast by the slopes of the Pambak Range, and on the west by Mount Kolgat (fig. 7).²⁷ As a result of excavations, a lot of animal bones have been discovered, identified and analyzed in Tsaghkahovit. Sheep constitute the largest percentage of the number of identified specimens (NISP) identified to genus (48%), followed by cattle (39%). There are higher proportions of domesticated livestock in the Iron III sample than in samples from earlier periods on the Tsaghkahovit Plain. The third most represented taxon is *Equus*, of which the most common in the sample is the domesticated horse (*Equus caballus*) (1.53% of NISP identified to genus). It is worth noting that, according to Xenophon and Strabo, the Armenian satrapy paid its tribute to the Achaemenid court in the form of horses. The very limited evidence for burning (0.72%, a single astragalus) and butchery (0.72%, a single second phalanx) on the horses' bones suggests that perhaps most of these animals were not consumed but raised for use as transportation. By the mid-first millennium BC in southwest Asia, although horses were occasionally consumed, their primary purpose was probably for transportation.²⁸

The importance of horses in the local economy at Tsaghkahovit was likely even greater than the faunal record suggests. It is certainly possible that the Tsaghkahovit economy was partially structured around the rearing of horses in order to pay taxes to satrapal authorities, who in turn fulfilled a tribute quota. Pigs and horses were



Fig. 7: Photograph of the Tsaghkahovit outcrop from the northwest.

also important elements of the Tsaghkahovit economy in the Iron 3 period. Horses, including domesticated taxa (*equus callabus*), comprise the fourth most common genus in the faunal sample and are more heavily represented than in any other period on the Tsaghkahovit plain. Sheep, goat, cattle, and pigs were major foci of the Tsaghkahovit productive economy in the Iron 3 period. It is likely that the small rooms in the heart of the settlement would not have accommodated the numbers of animals raised by the community. Sheep, goat, and cattle would also have supplied the community with other essential goods such as wool and dairy products. Tsaghkahovit's productive economy in the Iron 3 period appears to have been based on mixed agro-pastoralism. Tending to sheep, goat, and cattle was an essential part of daily life for part of the community.²⁹ Augmenting a diet of sheep, goat, cattle, and other animal products was a range of cultivated grains. Of the analysis of collected samples, 66 samples of the remains of the plants cultivated in this area have been identified. Wheat and barley are of the most cultivated species. As a result of the research, it is likely that millet, lentils and grapes were also cultivated in this area (fig. 8).³⁰ Discovering a great change among the clay findings of this site showed that agricultural commodities have been stocked in significant amounts in some parts of the region. It is possible



Fig. 8: Examples of archaeobotanical finds from Tsaghkahovit: 1. grain of cultivated hulled barley; 2. grain of tetra- or hexaploid wheat; 3. grain of emmer; 4. naked grain of broomcorn millet; 5. pip of cultivated grape; 6. nutlets of rose hip; 7. mericarp of *Galium* cf. *spurium*.

that these goods would be used for cold seasons, as well as for trading and selling to other parts of the Empire.³¹

Conclusion

Most of evidence indicates that the Achaemenid Empire took important steps to eliminate economic obstacles such as trade barriers within the kingdom. The result of this wise economic policy was the massive wealth flowing from satrapies like Babylonia and Armenia into the Achaemenid treasury. Persians, in addition to the vast commercial and economic support of the Armenian satrapy, also provided ground for facilitating other economic activities. In the meantime, major economic advances took place among the nations of the Achaemenid Empire, including Armenia. With the development of agriculture, Armenian exchange also increased with neighboring territories, which resulted in economic development. Growth in production has led to the promotion of

general welfare in the Armenian Satrapy. The heavy tax, which Armenia was obliged to pay to the Achaemenid government, suggested that the land was economically in a special position and was one of the most important sources of supplying financial costs to the Achaemenid government. The Achaemenids needed experts and cheap human force, suitable raw and basic material for construction infrastructures to develop their Empire, the western satraps were rich of such. In order to meet this purpose, that is to reach the western satraps, the Achaemenid had to dominate the free seas and western business ways. The Achaemenid's dominance over these satraps developed the economic system of the Achaemenid to a new stage, which can be called the transnational economy. Finally, it must be said that, the ancient Armenian governments had political and economic ties with the Achaemenids. Therefore, achievements of the Achaemenid era were important for political, cultural and economic reasons.

Notes

¹ This subject has been discussed more comprehensively in Turkish in L.G. Gökçek – E. Yildirim – O. Pekşen, *Economic and Agricultural Life in the Ancient Ages of the Anatolia* (Istanbul 2018) 459–544. – Imanpour 2010, 87; Brosius 2006, 20.

² Dandamayev 1997, 101; Tavernier 2007, 2.

³ Wiesehöfer 2009, 79.

⁴ Soleymanzadeh 2018, 73.

⁵ Diakonoff 1969, 297.

⁶ Bocchierian 2016, 4.

⁷ Soleymanzadeh 2018, 78.

⁸ Tekin 2017, 130.

⁹ Hdt.

¹⁰ Soleymanzadeh 2018, 79f.

¹¹ Sarıkaya 2016, 76.

¹² Hallock 1969, 254–259.

¹³ Duran 2015, 74 f.

¹⁴ Ceylan 2015, 4.

¹⁵ Hdt. 3.93; Briant 2002, 391.

¹⁶ Xen. an. 4.5.3.34.

¹⁷ Strab. 11.14.9.

¹⁸ Khatchadourian 2016, 217.

¹⁹ Durant 1964, 519.

²⁰ Khatchadourian 2016, 220.

²¹ Khatchadourian 2008, 403.

²² Arakelyan 1971, 143.

²³ Khatchadourian 2016, 129.

²⁴ Khatchadourian 2016, 134 f.

²⁵ Khatchadourian 2016, 135. 220.

²⁶ Parsamian 1963, 136–146.

²⁷ Khatchadourian 2014, 134. 139.

²⁸ Khatchadourian 2014, 163 f.

²⁹ Khatchadourian 2008, 285–287.

³⁰ Khatchadourian 2014, 163.

³¹ Khatchadourian 2008, 288.

Image Credits

Fig. 1: Khatchadourian 2016, Map 1. – Fig. 2: Khatchadourian 2008, fig. 3.2. – Fig. 3: B. Balmaki, New evidence for the Achaemenid Royal Road in the Alvand Mountains (Hamedan, Iran), *Antiquity. A Review of World Archaeology* 90, 2016, fig. 1. – Fig. 4: Khatchadourian 2016, fig. 9. – Fig. 5: Google Maps. – Fig. 6: Khatchadourian 2016, fig. 29. – Fig. 7: Khatchadourian 2008, fig. 5.3. – Fig. 8: Khatchadourian 2014, fig. 20.

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