



ECONOMY III. IN THE ACHAEMENID PERIOD

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The Achaemenid empire, extending from the Indus river to the Aegean sea, comprised such economically developed countries as Egypt, Syria, Phoenicia, Babylonia, Elam, and Asia Minor, lands which had their long traditions of social institutions, as well as Sakai, Massagetai, Lycians, Libyans, Nubians and other tribes undergoing the disintegration of the primitive-communal phase. Therefore, the socioeconomic structure of the empire was characterized by extreme diversity (Dandamaev and Lukonin, pp. 95-96). For this reason the empire remained a relatively decentralized state with each ethnic province honoring local customs and traditions (idem, pp. 90-91).

The predominant form of economic activity in the majority of the lands brought under the imperial rule by the Persians was agriculture (Dandamaev and Lukonin, pp. 95-96). Although possessing handicraft activities, the cities were still agricultural, and the urban population itself was chiefly engaged in agriculture. Barley was the most frequently sown cereal in the empire—grown in Babylonia, Egypt, Elam, and Persia— while spelt and wheat were less frequently sown. In Palestine wheat was staple food, along with peas, lentils, and mustard. In Babylonia, barley, millet, sesame, peas, mustard, garlic,



onions, cucumbers, apples, pomegranates, and apricots were grown. In Babylonia and Elam, wine, vinegar, and honey were basic foods, along with barley; dates were also consumed there and bread made from the seed. Wine production (for which ancient Persia was renowned) was also developed in Syria, Cilicia, Armenia, and Sogdiana, while Babylonia and Elam brewed beer from dates and barley. Egypt, Babylonia, Phrygia, and Persia were rich in livestock, but dairy products occupied an insignificant place in the diet of the population in the empire. Poultry and fish also constituted part of the food consumed (Dandamayev and Lukonin, pp. 130-31).

Three basic economic sectors co-existed side by side: the royal sector managed by the king's chancellery, the sector owned and operated by the religious temples, and the private sector. The Achaemenids introduced significant changes in the agrarian relations of the lands under their rule. Accurately measured lands were redistributed, and the best portions were taken by the king, the temples, business houses, the military elite, and the civil servants of the royal and temple administration (Dandamayev and Lukonin, 130). The view held by some scholars that the Achaemenid king was, theoretically, the supreme legal owner of all land has been contested. Available evidence shows that there were several kinds of major ownership in the empire: vast latifundia (particularly in Babylonia) leased out in large plots by the owners to major tenants, who would, in turn, sublet them in smaller plots; plots owned and tilled by small-holders; lands belonging to the royalty, i.e., the state, usually the best portions of lands confiscated from rulers and nobility of conquered countries who had refused voluntary subjugation themselves to the Achaemenids; and expropriated lands distributed among members of the royal family, friends and companions of the king, and the like. Large holdings were worked by hired labor, sometimes even brought in from neighboring countries (idem, pp. 132-34).

Select portions of land, leased out by the Achaemenid royal house, usually included areas of conquered regions which had been made the property of the king. In addition, many large canals in Babylonia belonging to the king were rented out by his managers too (Dandamayev and Lukonin, pp. 142-43). Some irrigation canals also belonged to the temples and private individuals (idem, p. 132). The Achaemenid kings also possessed irrigation constructions along the Akes river (Harīrūd) in Khorasan (Herodotus, 3.117), forests in Syria (Nehemiah, 2:8), the right to income from fish caught in Lake Moeris in Egypt (Herodotus, 2.149), as well as pleasure gardens and palaces in various parts of



the empire (Dandamaev and Lukonin, pp. 143-44).

Structurally, the royal sector was unified, and its various products were delivered from one place to another as required. A number of documents record the personal decrees of Darius I issued through the chief manager of the royal sector in Pharnaces. For instance, two letters contain orders to issue respectively 100 sheep and 200 measures of wine from the royal properties to Queen Irtashduna (Cameron, pp. 214-18; Hallock, no. 1795). According to one text, nearly 700 shepherds drove the “small livestock of the king” from Persia in the direction to Susa (Hallock, no. 1441). Judging by the number of shepherds, these herds apparently numbered in the tens of thousands of head (Hinz, 1971, p. 290). According to Aramaic and Babylonian documents and to Greek sources, large estates in conquered lands were distributed as hereditary property among the members of the royal family and the Persian nobility. A description of such households is found in the Aramaic letters of *Aršāma*, the satrap of Egypt, and of other Persian nobles to managers of their holdings in Egypt (see Driver, nos. I-XIII). *Aršāma* owned large flocks of sheep and goats in the Nippur area of Babylonia and rented them out (for reference see Driver, pp. 88-90). Several Babylonian documents refer to fields of Queen Parysatis, the wife of Darius II, located in the Nippur region and rented out to the *Murašū* business firm (Dandamaev and Lukonin, p. 136; Dandamaev, pp. 115-16; see also Xenophon’s *Anabasis* 2.4.27, mentioning the “villages of Parysatis” in Babylonia).

In consequence of the land tenure system introduced by Achaemenids, the royal administration settled soldiers of various ethnic origin on state lands. In theory, the land was considered to be of royal ownership, since there was no clear demarcation between state and royal property. The soldiers tilled the plots allotted to them collectively or rented them out, served their period of conscription, and paid royal taxes in silver and in kind. In addition to soldiers, some groups of royal artisans, shepherds, merchants, etc. were settled on state land (for references see Dandamaev and Lukonin, pp. 147-48).

Phoenician cities, with merchants controlling international maritime trade to a considerable degree, produced a purple dye and glass dishware intended for export. The production of clothing was developed in Miletus in Asia Minor, and in Babylonian and Egyptian cities. The royal sector also owned large workshops in various parts of the empire. In royal workshops in *Arachosia*, Persia, Babylonia, and Egypt craftsmen produced dishware for the requirements of the king’s court (Dandamaev and Lukonin, pp. 175-76).



According to Greek sources, 15,000 people were fed daily at a cost to the king of 400 talents of silver (Athenaeus, *The Deipnosophists* 4.115 b-146c, with references to Heracleides of Cyme, Ctesias, and Dinon).

A large number of officials were in the employ of the vast royal properties; they were charged with the management of the royal sector, which comprised a single entity within the entire empire. Persepolis economic documents drafted in Elamite in 509-458 B.C.E. give an idea of this sector. It comprised more than one hundred towns and settlements located in Persia and Elam and divided into six districts (Koch, pp. 217-311). This sector was served by more than 16,000 workmen (*kurtaš*), including stone masons, master woodworkers, carpenters, blacksmiths, and sculptors as well as shepherds, wine makers, beer brewers, etc. Ethnically, the *kurtaš* mostly consisted of the representatives of the conquered people, i.e., Egyptians, Babylonians, Lydians, Ionians, Cappadocians, Carians, Bactrians, Sogdians, etc. (for references and literature, see Dandamaev and Lukonin, pp. 158-70).

Documentary evidence about the economic sector owned and managed by temples is abundant only for Babylonia and, to a lesser degree, for Egypt. In Babylonia temples owned both large estates and trade and handicraft centers. The temples and other major Babylonian landowners also leased out part of their land-holdings, since they lacked sufficient numbers of agricultural workers. Hired labor, widely used on large estates, worked either the entire year or during the harvest. Hired hands sometimes were recruited even in the neighboring countries (such as Elam); in addition to wages, they were paid travel expenses and board (for references, see Dandamaev and Lukonin, p. 305). Small-holders, who usually tilled their land together with their family members, sometimes used the labor of slaves and hired hands during the period of harvest.

No documentary evidence is available from the Achaemenid period on the economic life of common Persians; only sporadic references appear in Greek sources. For instance, Herodotus (1.133) writes that when the Persians were celebrating a birthday, they served roasted oxen, horses, and camels. It seems that in Persia meat constituted part of the daily food consumption, while in most other countries of the empire (including even rich Babylonia) it was a luxury.

Despite its enormous size, the royal sector did not occupy a decisive place in the economy of the empire. The main source of state income was taxes, which



were used for the maintenance of the army, administration, and, partially, the royal court. A considerable portion of taxes were set aside in the royal treasuries located in Pasargadae, Persepolis, Ecbatana, Susa, Babylon, and other places (Curtius, 5.2.11, 5.6.9-10; Diodorus Siculus, 17.71.1; Strabo, 15.3.9). To judge from Herodotus (3.90-94), the total annual sum of taxes calculated in silver amounted to 14,560 Eubonic talents (1 Eubonic talent = 25.86 kg.) Taxes had to be delivered in unminted silver evaluated by purity and weight and meeting a given standard. In addition to taxes, subjects delivered to the king gifts of precisely determined sizes. But in contrast to taxes, gifts were paid in kind (e.g., trunks of ebony wood, elephant tusks, horses, vessels of gold, silver, etc.). While the dominant majority of subjects paid taxes, gifts were delivered only by the peoples who lived on the borders of the empire, i.e., by Colchians, Ethiopians, Arabs, etc. (Herodotus, 3.97). According to Herodotus (*idem*), the Persians, as the ruling people, were exempt from taxes and forced labor. This exemption apparently applied only to monetary taxes, for, the Persepolis documents indicate that the Persians were not exempt from taxes in kind (Hinz, 1971, pp. 289-92). In the Achaemenid inscriptions, the Persians are not included in the lists of nations performing obligatory service on construction works.

Although **Darius I** introduced a gold *daric* weighing 8.42 gm, which formed the basis for the Achaemenid monetary system, as well as the silver shekel with a weight of 5.6 gm., these coins were little used outside Asia Minor. In Persia itself coins were not in circulation. Workmen in the employ of the royal sector, and even the highest officials, were paid their salaries in unminted silver and products in kind. Such a practice is also attested to in documents from Babylonia and Egypt of the Achaemenid period. In general, the Persians used coins for commercial exchange with the Greeks along the borders of the state and for payment to salaried mercenaries, especially in Asia Minor (Babelon, p. XXI). In countries located beyond the Mediterranean (e.g., Babylonia), internal trade payments were made in ingots of silver. When coins came into circulation, they were also accepted by weight as unminted metal.

Our information about prices in Achaemenid Persia is scanty. According to Persepolis documents, during the period between 509 and 494 B.C.E., a sheep cost about 100 lit. of barley (Hallock, nos. 278, 364, 587, 588), sesame was three times more expensive than barley (*idem*, no. 297), and grain and various fruits (figs, apples, etc.) were equivalent to each other (cf. below). A donkey cost 500 lit. of barley or of fruit, and a jug of 10 lit. of local wine cost 30 lit. of barley



(idem, p. 5). For the period from 492 to 458 B.C.E. Persepolis documents give prices in silver. Thus, a sheep cost 3 shekels of silver, and a jug of wine with a volume of ten lit. cost 1 shekel (idem, pp. 5-8; Hinz, 1970, pp. 430-33). These prices were officially established in the royal sector and probably could differ from those on the free market. In comparison with Babylonia, for which abundant documentary evidence on prices has been preserved, grain in Persia was much more expensive, while wine in Persia was many times cheaper. Other food products in both countries cost more or less the same (Dandamaev and Lukonin, pp. 221-22).

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