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State Production and Market at Ebla – Animal and Wool Values¹

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Abstract. The kingdom of Ebla covered an area extending around 200 km from north to south and from east to west; that is, from the modern Syrian-Turkish border down to the oasis of Hama in the south, and from the Amug plain, where the delta of the Orontes River flows into the Mediterranean Sea, up to Emar, its allied city, whose territory reached the Euphrates. The Central Administration - the Palace - had at its disposal the revenues from its own administrative organization, with its workshops, as well as from the "village communities", represented by a large number of "Elders". Notwithstanding that, Ebla's envoys also acquire several types of goods, such as mules, cattle and sheep, garments and wool, from the markets of the cities in its own kingdom, and in other city-states, primarily from its archival, Mari. Luxury goods, on the other hand, were mostly acquired on the basis of ceremonial gifts from court to court. Long-distance-trade, however, was not relevant in the formation of the Syrian regional states. Goods (including the tributary deliveries its officials owed the Palace) were given also values in silver, and small goods, such as aromatic essences, were valued in wool. The average value of a head of cattle was around 25 shekels of silver, while a sheep was worth between 1 and 11/2 shekels. It is not possible to establish the exact value of the weight used for wool. These prices are in any case much lower compared to those used in Mesopotamia during the Ur III period.

Keywords: Ebla economy, market Ebla, silver as standard of value, cattle, sheep, wool.

1. INTRODUCTION

Administrative texts are by their very nature an extremely reliable source of data; although they contain occasional accounting errors, these are generally easy to detect. An evaluation of ancient Near Eastern admin-

^{1*} Special abbreviations and logograms: kb.: kù-babbar; m.: ma-na (1 mina: 470 g); sh.: shekel (1 shekel: 7.83 g). *Arr.*: minister Arrukum; *Ibr.*: minister Ibrium; *I.Z.*: minister Ibbi-zikir.

istrations based on these kinds of sources is, however, strongly conditioned by external and internal factors. Entire typologies of documents may have been destroyed because they were considered no longer useful, or they may only be represented by some randomly-preserved example, dating in general to the later periods, as is the case at Ebla for most of the entire animal breeding and agricultural sectors, as well as the records for the food provisions of the central Administration.² The book-keeping of some other particular administrative sector, moreover, could have been under the responsibility of a peripheral office, whose archive has not yet been found, or even one that did not consider written records necessary, as may be the case at Ebla for the procedure of conveying animals from where they were raised to the Central Administration.³

2. SHEEP AND CATTLE BREEDING AND THEIR DELIVERY TO THE PALACE

Document TM.75.G.2306 registers the number of sheep the Palace needed for a period of over three months of one of the very last years of the city: a total of 3,544 heads, to which 400 "dead sheep" were added (for unspecified reasons) belonging to the share owned by the Palace:

			(1)
obv. I.	1.	4 <i>mi</i> 30 lá-2 udu	428 sheep:
		nídba	offerings
	3.	é dingir-dingir-dingir	for the temples;
		1 <i>mi</i> 5 udu kú	105 sheep: food
	5.	en	for the king;
		15 udu kú	15 sheep: food
	7.	Ìr-ʾà-ag-da-mu	for (the crown prince) Ir'ak-damu;
		57 udu guruš	57 sheep: for the workers
II.	1.	é en	of the king's house
		23 udu	23 sheep:
	3.	al ₆ -du ₁₁ -ga	requested (at disposal);
		1 <i>mi</i> 20 udu kú	120 sheep: food
	5.	Du-bù-ḥu- ^d ʾÀ-da	for Tubuḥu-Haddu (son of the minister Ibbi-zikir);
		34 udu-nita!	34 rams:
	7.	(blank)	
		1 <i>mi</i> 30 lá-3 udu kú	127 sheep: food
	9.	kas ₄	for the messengers;
		12 udu	12 sheep:
III	. 1.	kaskal	for the journeys
		Ru ₁₂ -zi-ma-lik	of Ruzi-malik (son of thr minister Ibbi-zikir).
	3.	šu-nígin 9 <i>mi</i> 21 udu	Grand total: 921 sheep.
		2 <i>mi</i> udu ug ₇	200 (were) the dead sheep.
	5.	iti <i>za-ʾà-tum</i>	Month III.

(2)

² For animal breeding at Ebla, see Archi 1984; for the field text, see Milano 1987, and Milano 1996. Large part of the documentation concerning the food provision of the royal court and central bureaucracy had been published by L. Milano in *ARET* IX.

³ For the limits of the typologies of the documentation concerning the Near Eastern studies, see the important article by Miguel Civil (1980).

For a first study based on a quantitative analysis of the data offered by Ebla, see Archi 2017a, which concerns lapis lazuli, turtle carapaces, and a kind of shells. On the ceremonial gifts exchange between the courts of Ebla and Mari, see Archi 1999: 147–152 = Archi 2015: 179–187; on the gifts exchanged between Ebla and Dugurasu (Tukriš), in West Iran, see Archi 2016.

			2 <i>mi</i> 62 udu	262 sheep
		7.	é dingir-dingir-dingir	for the temples:
			1 <i>mi</i>	157
	IV.	1.	60 lá-3 udu kú	sheep: food
			en	for the king;
		3.	53 udu	53 sheep:
			kú	food
		5.	Ìr-ʾà-ag-da-mu	for (the crown prince) Ir'ak-damu;
			4 mi 75 udu guruš	475 sheep for the workers
		7.	é en	of the house of the king;
			60 lá-3 udu al ₆ -du ₁₁ -ga	57 sheep: requested (at disposal);
	V.	1.	82[+1] udu	83 sheep:
			Du-bù-ḥu-dʾÀ-da	for Tubuḫu-Haddu (son of the minister Ibbi-zikir);
		3.	1 <i>mi</i> 20 udu guruš	120 sheep: for the workers (of the king's house)
			1 <i>mi</i> 36 udu kas ₄	136 sheep: for the messengers
		5.	(blank)	
v.	I.	1.	šu-nígin 1 <i>li</i> 3 <i>m</i> [<i>i</i>] 43!	Gran total: 1,343 ¹
			2 <i>mi</i> udu ug ₇	200 (were) the dead sheep.
		3.	iti <i>gi-</i> NI	Month IV.
				(3)
			2 mi 20 lá-1 udu é dingir-din[gir]-dingir	219 sheep for the temples
		5.	1 <i>m</i> [<i>i</i>] 84[+1] udu	185 sheep:
	II.	1.	kú	food
			en	for the king;
		3.	54 udu	54 sheep:
			Ìr-ʾà-ag-da-mu	for (the crown prince) Ir'ak-damu;
		5.	4 mi 96 udu guruš	496 sheep: for the workers
			é en	of the house of the king
		7.	wa	and
			Du-bù-ḫu- ^d ʾÀ-da	for Tubuḫu-Haddu (son of the minister Ibbi-zikir);
	III.	1	1: 501/ 2 .1.1./	147.1 61
	111.	1.	1 mi 50 lá-3 udu kú	147 sheep: food for the messengers;
		3.	kas ₄ 1 <i>mi</i> 40 lá-1 udu níg-kaskal	139 sheep: travel provisions
		3.	I-bí-zi-kir	for (the minister) Ibbi-zikir
		5.	wa	and
		٦.	Ru_{12} - zi - $ma[-lik]$	(his son) Ruzi-malik:
		7.	40 udu	40 sheep:
	IV.	1.	al ₆ -du ₁₁ -ga	"requested" (at disposal).
	11.	1.	šu-nígin 1 <i>li</i> 2 mi 80 udu	Grand total: 1280 sheep.
		3.	iti <i>ḫa-li</i>	Month V.
		٥.	(blank)	
	V.		(blank)	
			()	

TM.75.G.2538 is a similar account, but annual: from the beginning of month III to the beginning of the same month of the following year. The total number of sheep needed that year by the Palace organization was 21,210 + 10[+x] sheep.

r.	I.	1.	4 <i>li</i> 8 <i>mi</i> udu é dingir-dingir-dingir	(1) 4,800 sheep for the temples.
			e dingii-dingii-dingii	for the temples.
				(2)
		3.	1 <i>li 7 mi</i> 80 udu	1,780 sheep:
			kú	food
	II.	1.	en	for the king
			Ìr-ʾà-ag-da-mu	(and the crown prince) Ir'ak-damu.
				(3)
		3.	1 <i>li</i> 6 <i>mi</i> 45 udu	1,645 sheep:
			al ₆ -du ₁₁ -ga	requested (at disposal).
				(4)
		5.	2 <i>li</i> 9 <i>mi</i> 66 udu	2,966 sheep:
			kú	food
	III.	1.	$SA.ZA_x^{ki}$	for (the workers) of the Palace
		2	wa n l ki	and
		3.	<i>Ib-la</i> ^{ki} é	Ebla, (and) the house
		5.	$Du^{-1}bu^{-1}-hu^{-1}-d^{-1}A-da>$	of Tubuḫu-Haddu (son of the minister Ibbi-zikir).
		٠,		or rubugu rindda (son or the minister 1991 Zian).
				(5)
			1 <i>li</i> 8 <i>mi</i> 3 udu	1,803 sheep:
		7.	kú	food
			SA.ZA _x ^{ki}	for the Palace
	73.7	9.	áš-da	by
	IV.	1.	I-bí-zi-kir Ru ₁₂ -zi-ma-lik	(the minister) Ibbi-zikir; (and his son) Ruzi-malik
			10^{-2}	(and ms son) Ruzi-mank
				(6)
		3.	3 <i>mi</i> 6 udu	306 sheep
			Ar- mi ^{ki}	for (envoys of) the city of Armi.
				(7)
		5.	5 <i>mi</i> udu šu-du ₈ -máš	500 sheep: for examinations of the exta.
				(8)
v.	I.	1.	2 <i>li</i> 5 <i>mi</i> 50 udu	2,550 sheep:
			gaba[-ru]	receipt
		3.	$[SA.Z]A_X^{ki}$	by the Pal[ace].
				(9)
			$4 l[i] 8 \lceil mi \rceil 60$ udu	4,860 sheep:
	II.	1.	še-ba	rations
		_	<i>Ib-la</i> ^{ki}	for (the people of) Ebla.
	***	3.	(blank)	
	III.	1.	(blank) [] 10 udu	[] 10 sheep.

			(10)
IV.	1.	(blank) $\acute{a} \check{s} \cdot d[a]$	From
		iti za- ʾà-tum	month III
	3.	si-in	to
		iti za- ʾà-tum	month III.

A detailed list of the sheep slaughtered for the needs of Ebla was drawn up every month, probably at a sheep-cote outside the city. The Central Archive preserved twenty-two of these lists, concerning the very last months leading up to the city's final destruction.⁴ One can deduce – considering the ductus – that these documents were drawn up by two or three scribes who were not employed at that archive. They were unbaked (which is anomalous for such large tablets); they present a slightly different ductus; and several of them are dated according to the local calendar, while the dating of the documents drawn up by the scribes of the Central Archive present the Semitic calendar (with extremely rare exceptions).⁵ Before the destruction of these monthly documents, their data were condensed and registered by the scribes of the Central Archive on much smaller tablets like the two presented above, which were likewise destroyed after a certain limited period.⁶

Documents concerning the agricultural sectors were not systematically collected, contrary to those concerning the incomes and expenditures of metals, or the distribution of clothing. Some earlier documents concerning the agricultural administration had been transferred to the Central Archive, when it was built at the time of minister Arrukum, because they were considered important, and were never eliminated; others from the time of ministers Ibrium and Ibbi-zikir were randomly preserved, and most of them are to be dated to the last period.

The state of Ebla was based on two counterposing forces: the "Palace", $SA.ZA_x^{ki}$, and the "village communities", which were represented at the Palace by a large delegation of "Elders", ábba (see Archi 2022a). Groups of villages could form "gates", ká; that is "districts", under the control of a "lord", lugal, or an "overseer", ugula, and part of their revenues (usually in silver) were presented by these officials to the Palace (see ARET XIV, 3–5), while other villages sent grain, other products and animals.

Some of these ká "gates" included also é "houses", which were owned directly by the Palace, or also whose revenues also belonged to members of the royal family, or officials of the Palace:

a) TM.75.G.2634 obv. I 1–II 6: 1,342 é gurus nu-su dumu-nita ir₁₁ SA.ZA_x^{ki} wa na-se₁₁ ugula ká 100 é [ir₁₁] en wa ama-gal en 75 é SA.ZA_x^{ki} 227 maškim SA.ZA_x^{ki} AN.ŠÉ.GÚ 1,744 é sa₁₀ gud-gud ká Bar-za-ma-ù "1,342 houses of workers, perfumers, orphans, servant of the Palace, and people of the overseer of the gate. 100 houses [of the servant] of the king and of the king's mother. 75 houses of the Palace. 227 houses of the representatives of the Palace. Total: 1,744 houses ... cattle. Gate of Barza-ma'u".

According to TM.75.G.1558, twenty-two "chief-herdsmen of the king", ugula-mùnsub-ugula-mùnsub lú en, each placed in a different settlement, were responsible for 67,200 sheep (Archi 1984: 63-64). Some lords had competence of the sheep of the Central Administration, as one may deduce from the following text, dated to the death of a king of Mari – more likely Nizi than Iblul-il – therefore to the first seven years of Irkab-damu's reign:

b) TM.75.G.1574 obv. I 1–III 3: 65,300 udu-udu lú šu *Du-bi-šum* 18,950 udu-udu lú šu *Dar-mi-a in* 1 mu "65,300 sheep in the hands of Dubišum; 18,950 sheep in the hands of Darmia. In the year ..."

⁴ Four of these lists have been published by in Pettinato 1979.

⁵ On the two calendars in use at Ebla, see Archi 2017b. That the first month of the year was iti *i-si* seems to be confirmed by the colophon in ARET XV 42, a text which includes expenditures of garments for several months, and has at the end, § 145, iti *i-si* iti *ig-za* iti *za* 'à-tum []. Previous studies are: Pettinato 1974/77, and Pettinato 1977.

⁶ Three other similar tablets, TM.75.G.1629, TM.75.G.16430; TM.75.G.2096, have been published by Pettinato (1977: 258–281).

⁷ See Archi 1984: 68–69. For the lord Darmia, see ARET XIV: 2–5.

At the time of minister Ibbi-zikir, according to ARET XIV 2a §§ 6, 7, the cattle available to the Palace were 3,710 heads (under the responsibility of Ida-nikimu), and the sheep 153,600 (under the responsibility of Aḫu-naše).8

The following two documents show that some account evaluated these revenues in silver:

c) TM.75.G.1958 obv. II 4–III 7: 16;47 ma-na kù:babbar *I-da*-NE ugula si 12;46 ma-na kù:babbar *A'-da-wa-zu* 4;32 ma-na kù:babbar *T-ti-*[LU]M [3;13 m]a-[n]a [k]ù[:babbar *Kùn-da-ba-an* ì-na-sum AN.ŠÈ.GÚ 37;18 ma-na kù:babbar níg-sa₁₀ 657 gud *Kùn-da-ba-an* zà-me "16;47 minas (7.888 kg) of silver: Ida-NE, the overseer ...; 12;46 minas (6 kg): Ada-wazu; 4;32 minas (3.234 kg) of silver: to Kunda-ban have given. Total: 37;18 minas (17.531 kg) of silver: value of 657 cattle (1 : 3.41 sh.): Kunda-ban has placed at disposal".

d) TM.75.G.10213: [2 mi-at 50+]3 ma-na kù:babbar [l]ú [g]ud-gud [l]ú ugula-ugula [k]á-ká [(x) ì-na-s]um [wa] 40 ma-na kù:babbar lú 'tu'-[d]a-sử al₆-gál é-siki ap 96 ma-na kù:[bab]bar₆ GIŠ-tum kù:babbar 'gud'-'gud' [a] l_6 ugula-ugula ká-ká wa al_6 ugula gud-gud nu-ì-na-sum é en AN.ŠÈ.GÚ 3 mi-at 90 lá-1 ma-na k[ù:babbar] níg-[sa₁₀] 9 l[i-im] 9 mi-at 41 gud ap 76 ma-na kù:babbar šu-bal-ak 25 ma-na šú+ša kù-g[i] níg-[sa₁₀] 6[+3 mi-at] 60 á[b-peš] in[(-x)] Si-'x' ['šu'-m[a] ugula gud-gud "253 minas (118.91 kg) of silver: (the value) of the cattle which the overseers of the 'gates' [have] given, [and] 40 minas (18.80 kg) of silver for their newborn (animals): present in the Treasure (the House of wool). Further, 96 minas (45.12 kg) of silver: the balance of the silver of the cattle (which is) competence of the overseers of the 'gates' and competence of the herdsmen (which) has not been given to the king's house. Total: 389 minas (182.83) of silver: value of 9941 heads (1 head = 2.6 sh.). Further, 76 minas (35.72 kg) of silver to be changed in 25;20 minas (11.907 kg) of gold to purchase 660+[100/300] (1 head : 2/1.59 sh.) cows in age to be impregnated ..."

The term áb-peš refers to a heifer which could be impregnated, that is, at around two years of age or a few months less, while áb-peš-maḥ was a "mature cow (to be impregnated)". A "young cow not impregnated", áb:peš nu-GIŠ-gál-tag4, was sacrificed on the occasion of the royal wedding, ARET XI 2 § 74. Text TM.75.G.1747 lists cattle in this sequence: gud-áb – áb:peš – amar 1 mu "cattle, cow in calf, calf of one year". TM.75.G.2283 obv. I 1–III 1 has: "Total 972 bulls, 935 mature cows in calf, 768 fattened oxen, 338 draughtoxen, 241 mature calves, 36 draught-calves", gud-maḥ, áb:peš-maḥ, gud:niga, gud-gíd, amar-maḥ, amar-gíd (Archi 1987: 122).

The kingdom of Ebla extended over a region with between 600 and 400 mm annual rainfall. In winter and spring even areas with 300 mm annual rainfall become covered with a thick lawn of vegetation, and today sheep farmers from the city of Saraqeb (near Tall Mardikh / Ebla) still keep their herds in the hilly region north-east of Hama.⁹

3. TEXTILE PRODUCTION

The important role that wool played in the economic development of Ebla from archaic times can be appreciated when considering that the place where silver and gold were stockpiled – the Treasury – continued to keep the name é-siki, "House of Wool".¹⁰

The working of wool, along with silver and gold, were the two major economic activities of the Eblaite secondary productive sectors. Metal incomes – unwrought and in the form of objects – were registered in annual

⁸ The dowry of Kešdut, daughter of the king Iš ar-damu and the queen Tabur-damu, who married a son of the king of Kiš, included (according to TM.75.G.2283) a total of 3,290 bovines, that is 972 bulls (gud-maḥ), 935 mature cow in calf áb:peš-maḥ), 768 fattened oxen (gud:niga), 338 draught-oxen, gud.GÍD), 241 mature calves (amar-maḥ(, 36 draught-calves (amar-GÍD). The total of the sheep was 1,680. Moreover: 159 onagers (BAR.AN), 1 donkey (IGI.NITA), 5 pigs (šaḥ), 19, 14 bears (az), see Archi 1987:122-124.

⁹ An image of Syria with average annual rainfall isohyets is published in Smith, Wilckinson, Lawrence 2014: 153. On pastural transhumance in the Jebel Bishri region, see Lönnquist 2014, pp. 100–104.

¹⁰ See the passages quoted in ARET XIV: 530.

documents under the label "delivery" mu-DU, to the Administration.¹¹ The textile production was registered in monthly documents, starting from the period of minister Arrukum; therefore, for about forty-one years. All these documents were preserved in the Central Archive.¹²

The rather low data of the textile production in comparison with the herds and other primary goods at the disposal of the Administration are explainable considering that these were the garments manufactured in the workshops in the city of Ebla together with those sent as ceremonial gifts by some peripheral centres and city-states. Raw wool was also distributed to the lower-level personnel.

ARET XV	túg "garments"	íb-TÚG "kilts"	ARET XV	siki "wool"
9	128	17	19	14 zi-rí 14 "KIN"
10	118	52	26	15 zi-rí 51½ "KIN"
11	254	61	32	33 "KIN" 1 na ₄
12	88	X	33	5 zi-rí 5 "KIN"
13	195	35	37	11 "KIN" 2 na ₄
15	113	29	39	2 zi-rí 23 "KIN"
16	115	31	41	112½ "KIN"
17	1201	29	43	13 zi-rí 302 "KIN"
18	95	36	49	35 "KIN" 1 na ₄
19	197	53	58	78 "KIN" 15½ na ₄

Garments and wool expended in ten months of the period of minister Arrukum according to the monthly documents

ARET XIX	túg "garments"	íb-TÚG "kilts"	ARET XIX	siki "Wolle"
1	98	97	1	13 zi-rí 95½ "KIN" 19 na ₄
3	234	77	3	234 gu-mug-TÚG
8	661	110[+x]	4	39 ½ "KIN"
9	242	210	6	8 <i>zi-rí</i> 3133 "KIN"
11	74	37	9	14 "KIN"
12	59	74	13	26 "KIN"
14	111	80	15	201 "KIN"
15	91	70	16	83½ KIN" 1 na ₄
16	66	53	18	1 <i>zi-rí</i> 2[+x] "KIN" 305 na ₄
17	136	116	20	3 zi-rí 15½ "KIN"

Garments and wool expended in ten months of the period of minister Ibrium according to the monthly documents

ARET I	túg "garments"	íb-TÚG "kilts"	ARET XIX	siki "Wolle"
1	565	368	1	12 "KIN"
2	263	142	3	6 "KIN"
3	494	238		//
5	1,032	547	4	1 zi-rí
7	830	181[+x]	6	1 zi-rí
8	775	296	9	//

¹¹ The documents have been published in Archi 2022b.

¹² A general presentation of the use of wool at Ebla is given by Biga 2014. For the value of wool in the Early Bronze Age in Mesopotamia, see Sallaberger 2014.

10	197	111	13	//
13	132	116	15	11 zi-rí 76 "KIN"
16	121	86	16	66 "KIN"

Garments and wool expended in ten months of the period of minister Ibbi-zikir

4. THE VALUE OF GRAIN, ANIMALS, AND GARMENTS IN SILVER¹³

Silver was the basic medium of exchange. The lemma níg-sa₁₀ means "price", and in general "value". MEE 2, 18 (TM.75.G.1305) obv. I 1–II 1: 26 gín (204 g) kb. níg-sa₁₀ guruš Ti-[t]i šu-ba₄-ti "26 shekels of silver, the price of a man, Titi has received". TM.75.G.1552 obv. III 2–4: 10 gín (78 g) kb. níg-sa₁₀ dumu-nita níg-du₈ *Ga-du-um* "10 shekels of silver, the price of a child ransomed (by) Gadum".

Some of the top officials of the Administration: the "lords", lugal, together with most of the "overseers", ugula, were at the head of villages or "gates", ká, that is: "districts" composed of several settlements (above, § 2). Their "deliveries", mu-DU, in silver were registered every year in annual documents (collected in ARET XIV). This kind of taxation system also foresaw that agricultural products valued in silver (usually barley, and in some case also oil) could be delivered instead. This procedure is preserved in a few cases, in passages like the following one:

a) ARET XIV 67 § 7: "2 ma-na kb. wa 3 mi-at gú-bar še a-dè 1 ma-na kb. mu-DU Ḥáb-ra-ar "2 minas of silver and 300 gú-bar measures of barley of the value of 1 mina of silver: delivery by Ḥabrar"; XIV 82 § 10: 1440 še gú-bar a-dè 3 ma-na kb. GABA-da-mu 1 ma-na kb. al₆-sù "1440 gú-bar measures of barley: (delivery by) GABA-damu; 2 minas of silver: his debt".

Only two texts present a large delivery of sheep valued in silver. According to text b, a certain Išga'um delivered a total of 76 minas, 20 of which were given by Abadanu (probably a subordinate of his), and another 20 minas were given personally by Išga'um. In order to reach the amount of 76 minas, he delivered 2,170 sheep valued 36 minas (= 2,160 shekels), that is: 1 sheep = 1 shekel. Another 13 minas remained outstanding as Išga'um's debt (al_6 - $s\dot{u}$). There are no data which would allow us to define the role of this Išga'um in the administration.

b) TM.75.G.2553: (1) 20 ma-na kb. A-ba-da- Γnu^1 Dur-N[E- du^{ki}] i-na-sum / (2) 36 ma-na kb. lú níg-sa $_{10}$ 2 li 1 Γmi^1 $\Gamma 70^1$? udu / (3) 20 ma-na kb. $I\check{s}_{11}$ -ga-um i-na-sum / (4) AN.ŠÈ.GÚ 76 ma-na kb. $I\check{s}_{11}$ -ga-u[m] i-na-sum 13 ma-na kb. al $_6$ -s \dot{u} / (5) iti ga-sum "(1) 20 minas (9.40 kg) of silver: Abadanu of the city of DurNEdu has given. (2) 36 minas (16.92) of silver: the price (/value) of 2,170(?) sheep. (3) 20 minas (9.40 kg) of silver: Išga'um has given (4) Total 76 minas (35.72 kg) of silver: Išga'um has given. 13 minas (6.11 kg) of silver (is) his debt. (5) Month VII."

Text c registers the expenditure of 214;42 minas (100.82 kg) of silver. Part of this silver had to be exchanged for gold for objects to be given as a dowry by the queen to her daughter Kešdut, who was betrothed to a prince of Kiš, as well as for gifts to the queen of Harran, and for Za'aše, the daughter of minister Ibbi-zikir, betrothed to the crown-prince Ir'aq-damu. Other silver was used for decorations, perhaps for chariots, and for the "purchase", nígsa₁₀, of garments by a certain Šar-a-ba₄. The final sum explains that 116;40 minas of silver were the equivalent of 10,000 sheep, each head being valued at $\frac{7}{10}$ of a shekel (7,000 shekels: 10,000 = 0.7). Šar-aba gave a further 26;55 minas (12.651 kg) of silver, and another 11;55 minas (5.50 kg) of silver for seven sides (of chariots)":

c) TM.75/86.G.3 rev. III 1–6: šu-nígin 2 *mi* 14 ma-na ša-pi 2 kb. *wa* ì-na-sum šà-sù ^Γ1¹ *mi* 16 ma-na ša-pi kb. lú 1 *rí-pap* udu 26 ma-na 55 kb. ^ΓŠar¹-a-ba₄ ì-na-sum 11 ma-na [30+]25 kb. [Ša]r-a-ba₄ 7 zag-me "Grand total: 214;42 minas (100.809 kg) of silver: 116;40 minas (54.833 kg) of silver of this (amount) has been given (in form of) 10,000 sheep (1 sheep = 0.7sh.). Šar-aba has given 26;55 minas (12,651 kg) of silver, (and further) 11;55 minas (5,601 kg) of silver Šar-aba (has given) for seven *sides* (*of chariots*)."

¹³ R. Englund (2012, 2014) is the author of two important studies on silver equivalences in the economy of the Ur III period.

Deliveries of garments to the Palace could also be valued in silver. Text TM.75.G.2316 registers deliveries of garments by some officials. Irti was probably one of minister Ibrium's son, while Enna-Dagan and Bazari were two of his representatives. Irti's precise role in the Administration, however, cannot be defined, nor can that of the other two officials (Biga 1981: 30-33):

d) TM.75.G.2316: (1) 400 sal-TÚG En-na-dDa-gan 200 sal-TÚG Ba-za-rí 2 maškim Ir-ti šu-mu-tag₄ níg-sa₁₀ 10 ma-na kb. / (2) wa 17 ma-na kb. Iš₁₁-gi-ba-ir maškim Ir-ti ì-na-sum / (3) 6;30 ma-na kb. I-ri-ig-da-mu Ga-ga-u₉ ì-na-sum / (4) 26;30 ma-na kb. al₆ Ga-ga-u₉ / (5) wa 100 ma-na kb. A-bu ì-na-sum / (6) níg-sa₁₀ túg-túg "(1) 400 garments Enna-Dagan, 200 garments Bazari: two representatives of Irti, have handed over; (their) value: 10 minas (4.70 kg) of silver / (2) And 17 minas (8 kg) of silver Išgi-ba'ir, the representative of Irti has given. (3) 6;30 minas (3.055 kg) of silver Irig-damu (and) Gaga'u have given. (4) 26;30 minas (12.455 kg) of silver: debt of Gaga'u. / (5) And 100 minas (47 kg) of silver Abu has given. Values of garments".

Goods expended by the Administration could also be valued in silver, according to the following document:

e) TM.75.G.2543 obv. I 5–9: 6 (gín) kb. níg-sa₁₀ 10 udu *ma-lik-tum En-na-ì* šu-ba₄-ri "6 shekels (47 g) of silver: value of sheep for the queen: Enna-i(l) has received"; II 4–8: 3 (gín) kb. mu₄^{mu} *Ma-da-na Za-ba-za*^{ki} šu-du₈ "3 (shekels) (23 g) of silver for garments: Madana of the city of Zabaza has taken in possession"; II 9–III 4: "4;02 ma-na níg-sa₁₀ 6 gud 1 ma-na kb. 2 IGI.NITA šu-mu-tag₄ níg-kaskal en *Ib-dur-i-šar* ugula gud-gud "4;02 minas (2.04 kg): value of six cattle; 1 mina (470 g) of silver: value of two donkeys: have been handed over as travel provision for the king to Ibdur-išar, the herdsman"; VI 1–5: 3 ma-na kb. níg-sa₁₀ 145 níg-sagšu udu¹²-nita è *áš-da* en "3 minas (1.41 kg) of silver: value of 145 níg-sagšu measures (of barley) for rams(?): expenditure from the king".

5. EVALUATION IN GOLD AND WOOL

According to some late documents datable to the last years in which the ratio between silver and gold had dropped down to 3: 1, or even 2.5: 1, Ebla even expended gold at the market, having easier access at it than other eastern states:

- a) TM.75.G.10096 (Archi 1982: 177) obv. I 1 II 2: 37 ma-na kù-gi níg-sa₁₀ še *Pa-a-ba*₄ šu-ba₄-ti "37 minas (17.39 kg) of gold received by Pa-aba for purchases of barley". This Pāba can only be the spouse of ḤI-dār, king of Mari, who visited him as prisoner at Ebla (Archi 2019c: 175-176).
- b) TM.75.G.11611 obv. I 1–III 3: 1 ma-na kù-gi níg-sa₁₀-níg-sa₁₀ En-na-ì wa A-bù si-in Si-\(^1\text{tùm}\)\(^1\text{ki}\) šu-mu-tag₄ 10 (gín) kb. níg-kaskal-sù iti ga-sum "1 mina (470 g) of gold for purchases to Enna-i(l) and Abu handed over in the city of Situm; 10 shekels (78 g.) of silver was their travel provision. Month VII".
- c) TM.75.G.10056 obv. I 1–II 2: 1;20 ma-na kù-gi 15'à-da-um-TÚG 5 ma-na kù-gi níg-sa₁₀ še 21 ma-na kù-gi níg-é-gul-gul 9 é-duru₅ $2^{1}/2^{1}$ $Ma-rt^{ki}$ ugula $A[-x(-x-)]-^{\Gamma ki}$ šu-b $[a_4-ti]$ (?) "1;20 minas (617 g) of gold: 15 mantel (at 5.3 shekels each); 5 minas (2.35 kg) of gold: price of barley; 21 minas (9.87 kg) of gold: allowance for 9 teams (of 20 men each) of Mari at $2^{1}/2$ shekels (each): the overseer of the city of A[...] has received".

Wool also was often used as standard of value, in particular for small goods as aromatic essences, or could be given as remuneration. Here below are just some few passages:

a) ARET I 1 § 87": 10 "KIN" siki níg-sa $_{10}$ GIŠ-šim ("resin essence") é en, § 88": 2 "KIN" siki níg-sa $_{10}$ 2 ma-hu ("..."); ARET II 15 § 21: 40 "KIN" siki níg-sa $_{10}$ a-gú ("...") 30 "KIN" siki níg-sa $_{10}$ GIŠ-ma-ir (a colour); ARET III 231 V 1–3; 2 "KIN" siki níg-sa $_{10}$ 2 GIŠ-asari ("two trays"); ARET XV 37 § 77: 4½ "KIN" siki níg-sa $_{10}$ ú-háb 8 "KIN" siki níg-sa $_{10}$ GIŠ-sal (a colour, "...") ki:lam $_{7}$ SA.ZA $_{x}$ ("bought at the Palace market").

b) ARET XV 8 § 90: 1 "KIN" siki šu-mu-tag4 nunuz-mušen "1 "KIN" measure of wool for having handed over ostrich eggs". 14

6. THE IMPACT OF THE MARKET¹⁵

Notwithstanding the internal resources of the state both in goods and manpower, Ebla bought manufactured goods, such as clothing, and even wool, at several markets (even from Mari, its rival city) despite having herds of more than 70,000 sheep at its disposal (above § 2). According to the following passage from a document to be dated to the first year of minister Ibrium, 4 minas of silver were expended for purchasing seventy-one garments, one kilt, and three lengths of linen by Nazi at the market in the city of Mari. ARET XXI 3 (Ibr. 01) § 73: 4 ma-na (1.88 kg) kb nig-sa₁₀ 71 'à-da-um-TÚG-I 1 íb+III-TÚG gíd babbar 3 gada-TÚG 'ki:lam₇' Ma-rt^{ki} Na-zi. Parallel passages also mention again him and/or another "merchant", dam-gàr, who bought garments, XXI 6 § 85: 12 ma-na (5.64 kg) kb. 162 aktum-TÚG 15 zara₆-TÚG 1 gada-TÚG 11 dùl-TÚG 5 níg-lá-sag 'ki:lam₇' Ma-rt^{ki} Na-zi; XXI 13 § 29: 8 ma-na (3.76 kg) kb. nig-sa₁₀ 150 aktum-TÚG 1 zara₆-TÚG 20 dùl-TÚG Ma-rt^{ki} ki:lam₇ Ma-rt^{ki} dam-gàr. Even honey and flour were sometimes purchased at Mari, as is exemplified by TM.75,G.10107 obv. I 1–II 2: 10 ma-na (4;70 kg) kb. níg-sa₁₀ túg-túg làl wa zíd l[ú] Ma-rt^[ki] "10 minas: price of garments, honey, and flour of Mari".

It was so common for Eblaite envoys to travel to different markets to purchase garments, that the Administration of Mari even considered a load of wool (together with other goods) a gift worthy of the king of Ebla, as shown in ARET XIV 79 § 41: 184 na₄ siki *Ma-rt*^{ki} níg-ba en *Šu-ga-du* sagi šu-mu-tag₄ "184 stone-weights of wool of Mari for the king were handed over by Šugadu, the steward (of Mari)".

Luxury goods were instead mostly acquired on the basis of ceremonial gifts from court to court, as was the case of lapis lazuli. Some delegations from Mari reached Ebla even several times a year, especially during the time of Ibbi-zikir, the last minister: these envoys usually brought clothing, but the chief delegation (the "steward", sagi) presented lapis lazuli, receiving gold in exchange (see Archi 2017a: 37-38).

The amount of lapis lazuli brought by envoys from Mari during the first thirteen years of minister Ibbi-zikir's term – when Ebla was at the height of its power – amounted to about 72 kg, and that acquired at several markets along the Euphrates valley (whose origin was ultimately the city of Mari, which acted as an intermediary between Kiš and the western regions), totaled about 58 kg, a clear example of the role that the market played in connection to the ceremonial exchanges involving such a highly coveted luxury good.

The impact on the market of other kinds of goods, such as clothing, objects, and animals as well (with the exception of mules imported from the territory of Nagar), was surely much less remarkable, because of the revenues which the Central Administration could raise from the production of goods manufactured in its own ateliers, from its own possessions, and through the taxation system.¹⁶

Text TM.75.G.1352 offers a rare example of a document concerning the amount of silver expended for "purchases", níg-sa₁₀, over one year: the "third one" of Arrukum (the name of this minister is mentioned in rev. V 4). Here below are some excerpts:

obv. I 1–III 1: 32;20 ma-na (15.197 kg) kb. níg-sa₁₀ 6 gír mar-tu kù-gi 6 gír mar-tu-ti kù-gi 31 gír mar-tu ba-du-u₉ kb. kù-gi 47 gír mar-tu ḫul 77 aktum-TÚG 23 zara₆-TÚG 36 sal-TÚG ... (15.197 kg of silver for ninety daggers of different kinds, several kinds of garments); V 5 – VI 3:] 16 GIŠ-gú-gú-ba-tum 200 udu ki:lam₇ [... (16 200 sheep at the market of [...]); VI 6–VII 2: ...] níg-sa₁₀ 10 gír mar-tu ḫul ki:lam₇ 'Du'-ub[^{ki}] (...] purchase of ten bad daggers at the market of the city of Tuba); VIII 2'-rev. I 1: ki:lam₇ Ig-dar^{ki}; I 5–6: ki:lam₇ Si-'à-am^{ki} (at the markets of the cities of Igdar, Si amu); I 7–III 1: 2;30 ma-na (1;175 kg) kb. 265 íb-TÚG 7 GIŠ-asari ki:lam₇ d'À-da (two hundred sixty-five kilts, seven trays at the market of the god Hadda); III

 $^{^{14}}$ For nunuz mušen-maḫ "egg of the big bird (i.e. the ostrich)", see ARET VII 77 §§ 5–7: 10 / 4 / 7 gín kb. 1 / 2 / 3 níg-sa $_{10}$ nunuz mušen-maḫ "10 / 4 / 7 shekels of silver for three purchases of ostrich eggs". For nunuz "ovoid", see Civil 2008: 66–67: nunuz.mušen. za = TE.MUŠEN "stone bird eggs".

¹⁵ On the interpretation of LAM₇.KI as ki:lam₇ (ganba) "market", see Conti 1997: 59-60 (nt. 139).

¹⁶ On the manpower employed in the city of Ebla, see Archi 2018: 203–213, 229–234.

5–7: 5 ma-na (2;35 kg.) kb. níg-sa₁₀ 29 aktum-TÚG 34 zara₆-TÚG ki:lam₇ *Ma-rt*^{ki} (63 garments: purchase at the market of Mari); VIII 1–VI 6–8: AN.ŠÈ.GÚ 53;10 ma-na (25.69 kg) kb. níg-sa₁₀ (total: 25.69 kg of silver: purchase of 91 daggers, 7 trays, 565 garments, 815 kilts, 50 GIŠ-MA/pèš-gíd, 38 na₄ measure of goat wool, 80 *ostrich eggs*: ḤU.UD); VI 6–8: šu-nígin 400 túg-túg níg-sa₁₀ 3 mu (grand total: 400 garments purchased: third year).

Markets were held – in many cases on the occasion of religious festivals – at Ebla itself, in cities of its kingdom, and in many city-states, such as Mari, a factor which has been previously noted by M.G. Biga.¹⁷ The people whom the Administration entrusted to provide cattle, garments, and wool (notwithstanding Ebla's own revenues), received some amounts of silver. Some names of these people occur several times: they could have been officials from the Palace; while others are qualified as "merchant", dam-gàr, or "trader", lú-kar (rarely: ga-eš₈). The fact that only two documents concerning the book-keeping of the journeys of two different merchants were preserved in the Central Archive shows that these merchants mostly acted on their own behalf, and were not institutional agents commissioned to obtain goods that were needed.¹⁸

One can conclude that valuable objects, including garments, were mostly exchanged through a ceremonial system, which consisted in a yearly issue of garments to the rulers and the Elders of the city-states which acknowledged Ebla's supremacy, and a counter-delivery from these cities of small amounts of silver and garments (of the same kind as those received!) once or twice a year. Only the city of Kablul regularly sent gold in amounts of ca. 5 minas (2.35 kg) during the years of minister Ibbi-zikir, evidently because it must have been situated close to the sources of gold.¹⁹ Major centres, such as Mari and Dugurasu (Tukriš, north of the Zagros mountains), also regularly exchanged exotic goods (year after year). Precious goods were also sent on the occasion of special events as a military victory by an allied state: the victory of the city of Armi over Abarsal, for example, prompted Ebla to send envoys bearing objects in gold (see Archi 2019b: 6-7).

The steady increase in data and some new intellectual insights have compelled scholars to reinterpret the formation of states in the ancient Near East; differently from the times when it was believed that the royal households of the Ur III period, and their dependents, included nearly all of the population.²⁰

According to recent theories long distance trade would have been the basis of the early formation of the state, not only in the period of the expansion of the Uruk colonies in the IV millennium: the commercial factor would also have played a decisive role during the Sargonic period, as the royal inscriptions seem suggest. A strong interaction with the eastern regions would have continued into the Ur III period.²¹

The Ebla of the 24th century BC presents a rather different picture. Only "mules", (ANŠE.)BAR.AN, (ANŠE.kúnga), a hybrid obtained by crossing onagers with jennies, were mostly imported from the Habur triangle, under the hegemony of Nagar (Tell Brak), at the border of a hilly region where wild onager once grazed. Mules however, were in time also bred on Eblaite farms (Archi 2019d: 45-47).

Ebla had contact with several cities in the far northeastern regions: Aššur $(A-\check{s}u-ru_{12}^{ki})$, Erbil $(Ir-b\acute{t}-\grave{t}-lum)$, and Hamazi $(Ha-ma-zi^{ki})$, with which it tried to establish ties to obtain mules in exchange for woodtimber. Only with Gasur $(Ga-su-ru_{12}/lu^{ki})$, however, and with Dugurasu, did relations remain intense until the final years, but this was based solely on ceremonial gifts (Archi 2016: 33-37).

¹⁷ Biga 2002, where she presents a long list of places and occasions in which these markets took place.

¹⁸ These two texts are ARET XVI 22 and TM.75.G.1245, studied respectively by Milano (2003) and Archi (2005).

¹⁹ For the first case, see Archi 2019a; for the deliveries to Ebla, see the mu-DU documents, published in ARET XIV.

²⁰ For a picture of the organization of the Old Akkadian period and its government, see Foster 2013: 111–119. According to Steinkeller (2021: 50–51) "the enormous effort and expense of sending their armies to the outer borders of Eastern Asia ... was the goal of controlling ... the main trade routes (so that they) created the first great commercial highway of the Near East", a thesis stressed in Steinkeller 2022. Sallaberger and Pruß (2015) analyzed the social distinction and the differentiation of the workers at Girsu of Lagaš, and those at Nabada (Tell Beydar) in Syria during the 24th century. For the Ur III Period, see the groundbreaking study in Steinkeller 2015.

²¹ On the Uruk period, see Algaze 2001. According to Steinkeller (2021, and 2022) international commerce was the main motivation behind the Sargonic expansion. On the activity of the Ur III merchant, see Snell 1975.

The case of lapis lazuli (mentioned above) exemplifies how an exotic good could be obtained by Ebla, more exactly how much through diplomatic relations and how much from the market. Lapis lazuli was extracted in Badakhshan; it reached Mesopotamia in the Kish region, and from there Mari. Ebla received most of it through ceremonial exchanges, but the amounts acquired on the market in the Euphrates valley, west of Mari, were also substantial.

The market factor concerned perhaps two dozen urban centres out of the whole of northern Syria including the Habur region. Its intense activity, well documented by Ebla, must have been based on a large exchange of goods. Notwithstanding that, the disproportion between the inner redistributive sector and inner-regional exchange (not to mention the inter-regional ones) remained very large.

7. PRICES

Dating of the documents: Arrukum (Arr.) was minister in the years 40–36 before the fall of Ebla; Ibrium (Ibr.) in the years 35–18; Ibbi-zikir (I.Z.) in the years 17–01.

7.1 Cattle

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gud (áb)
     TM.75.1379 (Arr.) obv. IX 1-4: 5;20 m. kb. níg-sa<sub>10</sub> 14 gud ki-lam<sub>7</sub> NI-ap<sup>ki</sup> (a small centre of Ebla), (1 gud = 22;86 sh.)
         rev. II 5-7: 156 udu ki-lam<sub>7</sub> Si-'à-am<sup>ki</sup> (a small centre of Ebla)
      TM.75.G.1413 (Arr.) obv. VII 1-5: 4;45 ma-na (2.231 kg) kb. níg-sa<sub>10</sub> 12 gud ki:lam, dGa-mi-iš (at the market of the god
     Kamiš), (1 \text{ gud} = 23;75 \text{ sh.})
     TM.75.G.1554 (Arr.) rev. 1-4: 5 gín kb. hi-mu-DU 1 gud udu-udu Ma-ri<sup>ki</sup>
     TM.75.G.1871 (Arr.) rev. III 17-IV 3: 18 ma-na kb. níg-sa<sub>10</sub> 35 gud-gud 13 áb (1 gud = 22.50 sh.)
     ARET XXI 3 (Ibr. 01) rev. II 6-11: 5 ma-na kb. níg-sa<sub>10</sub> 10 gud Ib-bí-um ugula é šu-ba<sub>4</sub>-ti (1 gud = <u>30 sh.</u>)
     ARET XXI 5 (Ibr. 02) obv. VII 15-20: 25 g. kb. níg-sa<sub>10</sub> 1 gud nídba en <sup>d</sup>À-da (1 gud = 25 sh.)
         obv. VIII 4-9: 1;13 ma-na kb. níg-sa<sub>10</sub> 2 gud nídba en d'À-da 'À-da-ni<sup>ki</sup> (1 gud = 36.5 sh.)
         rev. II 11-14: 1.36 ma-na kb. níg-sa<sub>10</sub> 3 gud ki:lam<sub>7</sub> SA.ZA<sub>x</sub><sup>ki</sup> (1 gud = 32 sh.)
         rev. XI 16-19: 14 ma-na kb. níg-sa<sub>10</sub> 61 gud ki:lam<sub>7</sub> d'À-da (1 gud = 13.77 sh.)
      ARET XXI 6 (Ibr. 03) rev. XIII 7-8: 2 ma-na kb. níg-sa<sub>10</sub> 4 gud (1 gud = 30 sh.)
     ARET XXI 7 (Ibr. 04) obv. XVII 10-13: 12;11 ma-na kb. níg-sa<sub>10</sub> 33 gud ganba d'À-da (1 gud = 22.15 sh.)
         rev. VIII 8-12: 6;10 ma-na kb. níg-sa<sub>10</sub> 38 gud in Ša-da<sub>5</sub><sup>ki</sup> lú Ì-mar<sup>ki</sup> (1 gud = 9.73 sh.)
     ARET XXI 11 (Ibr. 08) obv. III 6-7: 8;30 ma-na kb. níg-sa<sub>10</sub> 22 gud (1 gud = \underline{23.19 \text{ sh.}})
         obv. X 12-17: 1 ma-na kb. níg-sa<sub>10</sub> 4 gud Wa-ba-rúm En-na-i lú-kar Kak-mi-um<sup>ki</sup> (1 gud = <u>15 sh.</u>)
         obv. XII 8-12: 42 g. kb. níg-sa<sub>10</sub> 2 gud Ib-lu<sub>5</sub>-zú ki:lam<sub>7</sub> <sup>d</sup>Ga-mi-iš (1 gud = 21 sh.)
     ARET XXI 12 (Ibr. 09) rev. III 7-10: 10;52 ma-na kb. níg-sa<sub>10</sub> 80 gud ki:lam<sub>7</sub> <sup>d</sup>·À-da (at the market of the god Hadda), (1
     gud = 8.15 \text{ sh.}
      ARET XXI 13 (Ibr. 10) obv. V 13-14: 5;33 ma-na kb. níg-sa<sub>10</sub> 20 gud (1 gud = <u>16.65 sh.</u>)
          obv. XIV 4-5: 3;24 ma-na kb. níg-sa<sub>10</sub> 12 gud (1 gud = <u>17 sh.</u>)
     ARET XXI 14 (Ibr. 11) obv. XVII 3-5: 3;34 ma-na kb. níg-sa<sub>10</sub> 11 gud (1 gud = <u>19.46 sh.</u>)
     ARET XXI 17 (Ibr. 14) obv. XIII 7-10: 40 g. kb. níg-sa<sub>10</sub> 2 gud in SA.ZA<sub>x</sub> ki (1 gud = 20 \text{ sh.})
         rev. X 14-17: 25 g. kb. níg-sa<sub>10</sub> 1 gud ki:lam<sub>7</sub> dGa-mi-iš (1 gud = <u>25 sh.</u>)
         rev. X 18-21: 55 g. kb. níg-sa<sub>10</sub> 2 gud ki:lam<sub>7</sub> Kab-lu_5-ul^{ki} (1 gud = 27.5 sh.)
     ARET XXII 1 (MEE 10, 20) (I.Z. 01) obv. V 24-28: 30 g, kb. níg-sa<sub>10</sub> 1 gud nídba en dEn-ki (1 gud = 30 sh.)
     TM.75.G.2543 (I.Z.) obv. II 9-10: 4;02 ma-na kb. níg-sa<sub>10</sub> 6 gud (1 gud = 40.34 sh.)
      TM.75.G.2064 rev. I 1–3: 1 ma-na kb. níg-sa<sub>10</sub> 1 gud Ib-du-lu (1 gud = 1 mina)
      TM.75.G.2088 rev. I 7–8: 1 ma-na kb. níg-sa<sub>10</sub> 1 gud (1 gud = 1 mina)
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7.2 Sheep

The documents concerning the agricultural sector distinguish between "(native) sheep", udu, and "fat-tailed sheep", gukkal; see e.g. TM.75.G.1187 obv. I 1–III 2: 1 gukkal PN $_1$ / 2 gud 2 gukkal 8 udu PN $_2$ / 23 gud 15 gukkal PN $_3$ / 2 gud 5 udu PN $_4$ / 1 gud 5 udu PN $_5$ / 1 péš–áb 3 gukkal PN $_6$ 2 / udu PN $_7$ 4 udu PN $_8$. The other administrative documents use only the term udu.

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udu-nita sa<sub>6</sub> "ram of good quality"
     TM.75.G.1377 (Arr.) obv. IV 6-V 3: 10 gín kb. níg-sa<sub>10</sub> udu-nita sa<sub>6</sub> áš-ti Kab-lu-ul<sup>ki</sup>
     ARET XXI 2 (Ibr. 01) rev. XII 18-XIII 1: 18 gín kb. níg-sa<sub>10</sub> 6 udu-nita sa<sub>6</sub> ki:lam<sub>7</sub> SA.ZA<sub>8</sub>ki (1 udu-nita sa<sub>6</sub> = 3 sh.)
udu-nita "ram"
     ARET XXII 6 (I.Z. 07) rev. XIX 13-15: 42 gín kb. 28 udu-nita Ma-rt^{ki} (1 = 1.5 sh.)
     ARET XXII 9 (MEE 12, 37) (I.Z. 10) rev. XXII 24-25: 3 gín kb. níg-sa<sub>10</sub> 2 udu-nita (1 udu-nita = 1.5 sh)
         rev. XXII 24-25: 3 gín kb. níg-sa<sub>10</sub> 2 udu-nita (1 udu-nita = 1.5 sh)
udu sa6 "sheep of good quality"
     TM.77.G.730 obv. (Arr.) VI 6-7: 3 ma-na kb. níg-sa<sub>10</sub> 100 udu-udu sa<sub>6</sub> (1 udu sa<sub>6</sub> = 1.8 sh.)
udu "sheep"
     TM.75.G.1353 (Arr.) rev. III 3-7: 1 ma-na 5 gín kb. 50 m. urudu lú níg-sa<sub>10</sub> udu-udu níg-kaskal-sù "1;50 minas (861 g) of
     silver (and?) 50 minas (23.50 kg) of copper: price of the sheep (which were) the travel provision (for three people who went
     to the city of Armium)
     TM.75.G.1379 (Arr.) rev. II 5-7: 156 udu ki:lam<sub>7</sub> Si-'à-am<sup>ki</sup> (a small centre of Ebla)
     ARET XXII 4 (I.Z. 05) rev. XXII 15-16: 100 ma-na (47 kg) kb. níg-sa<sub>10</sub> udu-udu
     ARET XXII 6 (I.Z. 07) obv. III 13-16: 1 ma-na kb. níg-sa<sub>10</sub> udu-udu nídba Ar-miki "offering of (the city of) Armi)"
         rev. VI 30-33: 160 ma-na kb. níg-sa<sub>10</sub> 4600 udu-udu ap 1 udu 1 gín 3 NI kb. (1 udu = 11/3 sh.)
     ARET XXII 7 (I.Z. 08) rev. II 11–12: 31 ½ gín kb. níg-sa<sub>10</sub> 21 udu Ma-rt<sup>ki</sup> (1 udu = 1\frac{1}{2} sh.)
     ARET XXII 8 (MEE 12, 35) (I.Z. 09) obv. XIII 16-19: 9;50 m. kb. níg-sa<sub>10</sub> 250 udu in 1 gín. 3 NI kb. (1 udu = 1½ sh.) -
     (nig-sa_{10}) 255 udu in 1 gín kb. (1 udu = 1 sh.)
     ARET XXII 12 (I.Z. 13) obv. IV 11: 3;15 ma-na kb. níg-sa<sub>10</sub> 100 udu (1½ (gín kb.)
     TM.75.G.10056 obv. III 3-7: [x] kb. níg-sa<sub>10</sub> 1 udu En-na-i šu-du<sub>8</sub>
síla-munus gukkal "female lamb of a fat-tailed sheep"
     TM.75.G.1413 (Arr.) obv. II 8-9: 2 gín 1 síla-munus gukkal
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7.3 Wool

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ARET XXII 7 (I.Z. 8) rev. II 13–17: 11;40 ma-na kb. níg-sa_{10} 951 na_4 siki Ma-rt^{ki} ap níg-sa_{10} 1 (gín) kb. 1.5 na_4 siki Ma-rt^{ki} (1 na_4 sa_6 = 0.7 sh.)
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ARET XXII 8 (I.Z. 9) (MEE 12, 35) obv. XIII 23–XIV 1: 56.20 ma-na kb. níg-sa₁₀ 5780 na₄ siki *ap* níg-sa₁₀ 1 gín kb. 3 na₄ siki 5800 na₄ siki níg-sa₁₀ 1 gín (56;20 minas = 3380 sh; 5780 na₄ siki at 3 sh. each: = 1927 sh. / 5800 na₄ siki at 4 = 1450 sh; total: 3377 sh.)

rev. VI 29–VII 2: 2;17 ma-na kb. 232 na₄ siki $Ma-rt^{ki}$ ap Á-GÁ-II 2 na₄ siki 1 (gín) kb. ap Á-GÁ-II 1 ½ na₄ siki 1 (gín) kb. ("that is both 2 na₄ and 1 ½ na₄ siki of the value of 1 sh. of silver)

ARET XXII 9 (I.Z. 10) (MEE 12, 37) obv. I 30-31: 2;20 ma-na kb. níg-sa₁₀ 470 na₄ siki (1 na₄ = 0.3 sh.)

rev. XX 23–24: 2;27 ma-na kb. níg-sa₁₀ 245 na₄ siki (1 na₄ = 0.6 sh.)

ARET XXII 10 (MEE 12, 36) (*I.Z. 10*) rev. XVI 12–XVII 3: 3;10 ma-na kb. níg-sa₁₀ 440 na₄ siki $Ma-rt^{ki}$ ki:lam₇ λ -da- nt^{ki} (1 na₄ = 0.4,4 sh.) (and others cities)

ARET XXII 11 (*I.Z. 12*) rev. XVII 10–11: 14;44 ma-na kb. 1290 na₄ siki *Ma-ri*^{ki} (1 na₄ = 0.6 sh.)

ARET XXII 12 (I.Z. 13) rev. X 5–10: 5;22 (gín) kb. 500 na₄ siki $Ma-rt^{k_1}$ šè níg-sa₁₀ 1½ na₄ siki 1 (gín) ki:lam₇ (1. na₄ = 06 sh.)

ARET XXII 18 (I.Z.) rev. XII 23-26: 1:03 ma-na 110 na₄ siki Ma-rt^{ki} ki:lam₇ 'À-da-nt^{ki} (1 na₄ = 0.6 sh.)

8. CONCLUDING CONSIDERATIONS

The wool measures at Ebla were: *zi-ri*; "KIN"; and na₄, which stood respectively on a 1 : 2, and 1: 2 ratio (Zaccagnini 1984). The weight of a single fleece is estimated of ca 0.780 kg.

According to TM.75.G.2417 rev. XIV 12–XVI 15, 1 zi-ri (i.e. 4 na₄) of wool was given to the person performing the offering rite to the god Kura; the bridles and the harnesses of the four oxen hitched to the wagon which brought the royal couple to the sanctuary of NEnaš for the wedding ritual needed 1 na₄ and 1 "KIN" (2 na₄) of wool respectively. The opening of the gate of the sanctuary of the goddess Ganana required a further 1 zi-ri of wool. The two "shawls", maš-da-bù (maštāpu), of black and white wool which the king and queen had to wear in that ceremony needed another 1 zi-ri (Archi 2021: 11, 16).

Minister Ibrium's chariot needed 5 "KIN" of wool, according to ARET XIX 6 § 22.

The brother of minister Ibrium's father received 2 "KIN" of wool, as well as the spouses respectively of three and five officials, ARET XIX 6 §§ 19, 10, 12; while four of the king's daughters received 4 "KIN" each (§ 24).

According to the monthly document ARET XIX 16 §§ 47–48 the seven "cooks", muḥaldim, (of the Palace), received $1^{1}/_{5}$ "KIN" (= 3 na₄) measures of wool each, while an unspecified number of cooks from the "outskirts", eri-bar, received altogether 10 "KIN" measures. According to ARET XIX 6 (another monthly document) § 23, the same seven "cooks" received 2 "KIN" each.

ARET XX 2 § 34 (period of minister Ibrium) concerns a distribution of one "KIN" measure of wool to each of 5,001 men, mostly grouped in "gangs", *ir-a-núm*, who were usually employed in military expeditions. Among the recipients were also some of the king's son, "Elders", ábba, "overseers", ugula", "representatives", maškim, and personnel of the Palace, such as the "cooks", muḥaldim, and "metalworkers", simug.

These deliveries seem to have been annual.

Hundreds of monthly documents register annual expenditures of garments as gifts to members of the court and representatives of other cities, in addition to wool for the personnel. The deliveries to the "men", guruš, assigned to the *ir-a-núm* could also alternately consist of garments (e.g. ARET XX 8 § 36), and of wool in the amount of $2\frac{1}{2}$ "KIN" (that is three na_4) as in ARET XX 9 §§ 33–45; this is the same amount received by the personnel of the Palace, which included: "representatives, singers, cooks, metalworkers, carpenters" (§§ 48–53). According to ARET XX 12 §§ 11–17, 17 §§ 1–10, and 19 §§ 1–13, more than half of the men of each *ir-a-núm* received garments, while the other men got three na_4 of wool each; the same amount was received by the Palace personnel registered in the following sections. The "women", dam, of the Palace and its workshops received instead one "KIN" (i.e. $2 na_4$) of wool each, with some exceptions. such as the seventeen senior women at the service of the queen, who received three na_4 ; while her twenty-seven "junior servants", dam pa_4 -šeš tur, received only two na_4 (rev. VII 33–VIII 7).

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gu-dùl-TÚG (a kind of dress) 420 "KIN" for 210 items – 1 item: 4 na<sub>4</sub> (obv. I 1–3); same ratio in II 3–5, II 8–III 2

níg-sagšu "helmet" 2 "KIN" for 4 níg-sagšu – 1 item: 1 na<sub>4</sub> (obv. III 9–11)

níg-sagšu lú zag "helmet..." 5 "KIN" for 5 níg-sagšu – 1 item: 2 na<sub>4</sub> (obv. IV 1–3); 1 na<sub>4</sub> for 1 <níg-sagšu – 1 item: 1 na<sub>4</sub> (obv. IV 9–11);

níg-lá-gaba "breast-band" 200 "KIN" for 400 items – 1 item: 1 na<sub>4</sub> (rev. VI 3–5);

íb-III-TÚG-gùn "kilt" 25 "KIN" for 50 items – 1 item: 1 na<sub>4</sub> (obv. I 4–6)

túg-du<sub>8</sub> "felt" 2035 "KIN" for: 100 large (maḥ) felts of 14 na<sub>4</sub> (each), 30 large felts of 11 na<sub>4</sub> (each), 30 large felts of 6 na<sub>4</sub> (each): of the couriers (the total of the expended wool is of 1943 "KIN" instead of 2035!)

ma-za-bù "cushion" 22 20 "KIN" for 10 items – 1 item: 4 na<sub>4</sub> (rev. IV 4–6)
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Wool employed for garments, felts, and cushions

Based on these values, a possible hypothesis is that one na_4 measure, that is, a "stone", could have been more or less the equivalent of one mina. Several passages distinguish between a "big" and a "small" na_4 : mah / tur, which could have hypothetically corresponded to the Mesopotamian and the Syrian mina weighing 470 g and 505 g respectively.²³ Accepting these values, it would seem that the allotments of wool given as remuneration to the working dependents at Ebla was a bit lower than what workers received in Mesopotamia during the Sargonic period, when men received four or five minas; that is, between 2 to 2.5 kg of wool.²⁴

Whichever estimate is accepted, one na₄ of "good quality", sa₆, wool was valued at either 1.6, 1, or 0.8 shekels each; the other wool at 0.7 or 0.6 shekels (see 7.3 above).

9. PRICES AT EBLA AND AT UR III: A COMPARISON

A comparison between the prices of animals and wool at Ebla and those of the Ur III period in Mesopotamia presents different scenarios that are difficult to explain, even more so if one considers that the mina of Ebla weighed 470 g and the Mesopotamian mina was 505 g.

The price of "cattle", gud, was considerably lower: at Ebla it varied mostly between 20 and 30 shekels, reaching in two cases 1 mina. At Ur III it varied between $\frac{5}{6}$ and 1 mina; a cow, áb-má $\frac{1}{6}$, was worth between $\frac{2}{3}$ and $\frac{5}{6}$ of a mina (Cripps 2019a: 62–63, 60–61).

The prices of sheep (and goats) were extremely low at Ebla in comparison. A "ram", udu-maš, was worth between 3 shekels and 1½ shekels. The price of a "good sheep", udu ša₆, was of 1½ shekels, and that of a "sheep", udu, varied between 1 shekel and 1½ shekels. At Ur III, the value of a sheep or a goat, udu-máš, was usually 14 shekels, reaching in some cases 30 shekels (Cripps 2019a: 58–59).

The Ebla values are, therefore, not compatible with those from the Ur III period, at least according to the evaluation of the Administration. Furthermore, wool fluctuated in Ur III between the ratio of 1 mina: 8 shekels, and 1 mina: 12 shekels (Cripps 2019b: 28-33).

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²² Pasquali 1997: 253-255.

²³ Passages mentioning these two different minas are listed in ARET XX: 274.

²⁴ Foster 2014: 119. Gelb (1965: 236) attributes 4 minas to the men and 3 minas to the women in the Ur III period.

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Fig. 1. TM.75.G.2306.





Fig. 2. TM.75.G.2538.