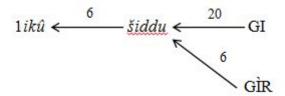
The Economy of Emar III

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[The present article completes my research on real property sale contracts from Emar with a study on the small number of documents pertaining vineyards and orchards stemming from the city. Additionally, this contribution ends with two sections (§ 7 and § 8) dedicated to additions and corrections to my previous articles "The Economy of Emar I" (AuOr 28) and "The Economy of Emar II" (AuOr 30).]

Keywords: Emar, Late Bronze Age, sale contracts, economy.

Within the framework of my research project on the economy of Emar** the present contribution focuses on sale contracts of those agricultural lands that were not concerned in my former article "The Economy of Emar I", namely vineyards and orchards as well as other types of rural lands that are occasionally attested in the Emar documentation. The present study aims at examining which factors affected prices. Additionally, enquiries on sale contracts will provide grounds for comparing the markets of the various types of agricultural land. As in the mentioned article the reconstruction of the measurement units illustrated in Mori (2003), 104-105, is adopted here. The relationship between each unit of measurement is sketched as follows:



1. Vineyard sale contracts

Agricultural lands suitable for cultivation of vines were a feature of the Emar landscape as is clear from the textual evidence where vineyards are denoted by the Sumerogram ^(giš)KIRI₆.GEŠTIN or more

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 - ** Abbreviations: PN = Personal Name; ZF = Zū-Ba'la's family; RF = Royal Family; NIN = Ninurta; sh.
 - 1. Viano 2010.
 - 2. For an alternative reconstructions see ibid., 259 n. 2.

Recibido/Received: 15/01/2016 Aceptado/Accepted: 09/03/2016 rarely A.ŠÀ ^(giš)KIRI₆.GEŠTIN. Only fifteen vineyard sales are known from the Emar documentation; ten texts are the product of the Syrian scribal tradition and five belong to the Syro-Hittite tradition. In addition a vineyard is included in the Syro-Hittite list of real properties E 168. In five instances vineyards are sold together with other real properties as shown in Table 1.

Text	Script	Sold Property
BLMJ 5	S	1 house – 1 vineyard
BLMJ 9	S	1 vineyard
E 1	S	1 vineyard
E 3	S	1 field – 1 vineyard
E 11	S	1 vineyard
E 120	SH	1 house – 1 vineyard
E 138b	S	1 vineyard ³
E 89	SH	1 vineyard
E 90	SH	1 vineyard
E 225	SH	1 house – 1 vineyard – part of <i>tugguru</i> building
Hirayama 16	S	1 vineyard
RE 16	S	1 vineyard
RE 51	SH	1 vineyard
SMEA 30 4	S	1 house – 1 vineyard
TBR 51	S	1 vineyard

Table 1

Table 2 lists the main data of each vineyard sale; texts providing the purchase price are indicated in bold.

Text	Script	Location	Measurements	Surface	Price	Square <i>ikû</i> Price	Buyer	Seller
BLMJ 5	S	raqqatu of the sons of Iaḫī-ilu	L: 1 <i>ikû</i> W: 1 <i>ikû</i>	1	?	?	PN	RF
BLMJ 9	S	Rabban	NG	?	100	?	PN	PN
E 1	S	Rabban	L: 1 ikû 1 šiddu W: 1 šiddu	0,194	?	?	PN	NIN
E 3a	S	Rabban	L: 1 ikû 1 šiddu W: 1 ikû	1,167	?	?	PN	NIN
E 11	S	Rabi	L: 1,5 ikû W: 2 šiddu	0,5	100(?)	200	PN	NIN
E 89	S	City of (?)	L: 1 šiddu W: 1 šiddu	0,028	15,5	558	PN	PN
E 90	SH	Uri	L: 3 šiddu W: 2 šiddu	0,167	60	360	PN	PN
E 120	SH	?	NG	?	?	?	PN	PN
E 138b	S	Rabban	L: 1,5 <i>ikû</i> W: 1 <i>ikû</i> 5 GÌR	1,708	50	29,268	RF	PN

^{3.} E 138 contains purchases of two other properties (a field and a tugguru-building) but the sales are recorded separately.

E 225	SH	raqqatu	NG	?	?	?	ZF	ZF
Hirayama 16	S	Rabban	L: 2 ikû W: 2 šiddu	0,667	200	300	PN	PN
RE 16	S	Rabban	L: 1 ikû W: 3 šiddu 5 GÌR	0,639	120	187,826	PN	NIN
RE 51	SH	Rabban	L: 3 šiddu W: 1 šiddu	0,083	18	216	PN	PN
SMEA 30 4	S	NG	NG	?	?	?	PN	NIN
TBR 51	S	Rabban	NG	?	43	?	PN	PN
Average				0,615	78,5	264,442		

Table 2

A few remarks on Table 2 are required. The purchase price in E 11 is not fully preserved, [a-na x m]e-at KÙ.BABBAR, but a value of 100 shekels is presumed because me-at is mostly preceded by the numeral 1 in the Emar documentation. However, a price of 200 shekels is not excluded.

The text E 89 poses several problems. The surface area of the purchased vineyard is inaccurately known because sizes are not fully preserved, 1 $\check{s}i$ -id- $d[u_4...]$ // 1 $\check{s}i$ -id- $[du_4...]$ (II. 3-4). However, the value of 1 square $\check{s}iddu = 0.028$ square $ik\hat{u}$ is assumed here based on the fact that the vineyard surface area would not significantly change with the addition of the submultiples of the *šiddu*. The purchase price, 15 $\frac{1}{2}$ KÙ.BABBAR.MEŠ 20 GIŠ p[a...] (II. 14), includes a quantity of an unpreserved commodity, presumably barley. It is unclear if barley was a supplementary price or it should be interpreted as equivalent to the amount of silver. However, in my opinion, it is more reasonable that the full price includes a quantity of barley in addition to the sum of silver. Indeed no evidence supports the equivalence 15 ½ silver shekels = 20 parīsu of barley. Four Emar texts (ASJ 10 E, E 121, FK 2, TBR 25) mention the price of barley during years of war or famine. The barley-silver rate during a year of famine in ASJ 10 E, E 121 and FK 2 is 3 $q\hat{u} = 1$ shekel⁷; in TBR 25, written at the time of the attack of the TAR.WU/PI troops attack, the rate was $1 q\hat{u} = 1$ shekel. Several sources witness that in western Syria the parīsu was reckoned at 50 $q\hat{u}^8$; hence at Emar during the years of distress 20 parīsu would have corresponded to a quantity between 333,33 and 1000 shekels of silver. This exchange rate would make unreasonable the price for the vineyard sold in E 89, which, additionally, does not make any allusion to hardship afflicting the city of Emar. A more reliable equivalence can be inferred from a Hittite law (§ 183)⁹, ŠA 4 P[A ŠE[?] ½[?]] KÙ.BABBAR], "the price of 4 parīsu of barley is ½ shekel of silver". The system of weight was different at Hattuša and Emar: at Emar and Karkemiš a mina of 470 grams was divided into 60 shekels¹⁰ of 7,83

^{4.} In Hirayama 13 the price includes silver and another commodity as is clear by the conjunction \hat{u} that, conversely, is not attested in E 89 and E 128 (another document in which the full price is expressed in silver and barley).

^{5.} For a case of supplementary payment from Mari see Charpin 2010, 27-29, cf. BiMES 16, 36-37 = TFR 1 6; I owe these references to Prof. D. Charpin.

^{6.} ASJ 10 E is a purchase of a slave whereas E 121, FK 2 and TBR 25 concern servitude for debts.

^{7.} The identical barley-silver rate suggests that these texts refer to the same event and were contemporary.

^{8.} See Westenholz 2000, xiv, with previous bibliography.

^{9.} Hoffner Jr. 1997, 146, cf. CAD P, 186.

^{10.} Westenholz 2000, xiv.

grams each, whereas in Hatti one *mina* corresponded to 40 shekels of 11,75 grams each. On the basis of this ratio 20 $par\bar{\imath}su$ of barley would correspond to a reasonable quantity of about 1,66 shekels of silver at Emar. Therefore, the price per square $ik\hat{u}$ of the vineyard sold in E 89 would be about 618 shekels of silver. Nevertheless, I prefer not to venture in calculating the full price in E 89 based on this unique and broken reference. 12

Vineyard surface areas in sale contracts range from 0,028 to 1,708 square $ik\hat{u}$ with an average of 0,615 square $ik\hat{u}$. Purchase prices range from 15,5(?) to 200 shekels of silver with an average of 78,5 shekels of silver. Prices per square $ik\hat{u}$ range from 29,268 to 558(?) sh. but they can be only calculated for seven vineyards. The average price per square $ik\hat{u}$, 264,442 sh., is likely poorly indicative because it is based on a very limited number of sources.

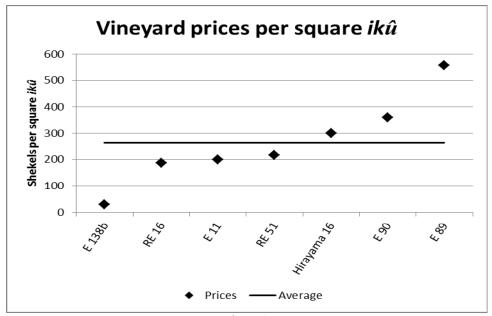


Figure 1

As shown in Figure 1, thre range of prices per unit area in vineyard sale contracts is wider than in other real property sales (i.e. fields, houses, KI erṣetu-plots). 13

- 11. Parise 1984, 128-129.
- 12. The documentation of Ugarit does not seem to provide the price for barley, see Heltzer 1978, 17.
- 13. Viano 2010, Viano 2012.

For each sold vineyard Table 3 indicates location, buyer and seller as well as the owners of the adjoining properties. The members of the Emar royal family are indicated in bold.

Text	Script	Location	Buyer	Seller	Upper Side	Lower Side	1st short side	2 nd short side
BLMJ 5	S	River	Puašata	Pilsu-	Sons of	[]	[]	[]
		plain of	son of	Dagan son	Narba			
		the sons of	Šadī-	of Baʿal-				
		Iaḫī-ilī	Dagan	kabar				
BLMJ 9	S	Rabban	Rašap-abu	Ipḫur-	Abda son of	Naʿmī-	Rašap-abu the	
			son of	Dagan son	Šēʾī-Dagan	šalamu son	sailor	Alal-abu
			Abī-kāpī	of Baʿal-		of Šēʾī-		
				bēlu		Dagan		
E 1	S	Rabban	[]	NINURTA	Ra-[]	Sons of []	Baʿal-kabar	Šu[]
						son of	son of Iași-	
						Dagalli	Dagan	
E 3a	S	Rabban	Ir'am-	NINURTA	Vineyard of	Vineyard of	Sons of	Euphrates
			Dagan son		Pilsu-Dagan	Per'i-	Ir'am-Dagan	
			of Illatu		son of Baʿal-	Da(gan) son		
					kabar	of Išbi-bēlu		
E 11	S	Rabi	Awiru son	NINURTA	Vineyard of	Karbu son	Aḫī-ḫamiṣ	City of Rabi
			of Aḫī-		Nakiru son	of Elli son	son of Kukku	
			Dagan		of Abī-[]	of Qinnitu		
E 89	SH	City of	Ba'al-	Al-aḫāti,	[]	Rašap-[]	Abdī son of	<i>huhinnu</i> of
		[]	kabar	Ia[]			Ӊаbu	the sons of
								Kāpī-Dagan
								son of Zadu
E 90	SH	Uri	Rībi-	Putuḫulasi	Aia-damiq	Še'i-bēlu	Habu son of	Burāqu son of
			Dagan son	son of Ilī-	son of Zikria	son of Ahiau		Magalu
			of Abī-	aḫī			Uri)	
			li'mu					
E 120	SH	NG	Milki-	Baʿal-	NG	NG	NG	NG
			Dagan son	qarrād son				
			of Aḫī-	of Aḫī-				
			Dagan son	Dagan son				
			of Milki-	of Milki-				
			Dagan	Dagan				
E 138b	S	Rabban	Işşur-	Abdu son	Kalalu son of	Ea-dumqi-	Sons of Alal-	Işşur-Dagan
			Dagan	of Şilla-	Lasqu	šarri	abu	son of the
			son of	Da(gan)				king
			Baʿal-					
			kabar					
E 168e	SH	?	-	-	[]	[]	Euphrates	Road of the
								irrigation
								district of
								Sunrise ¹⁴

^{14.} See Reculeau 2008, 135 and n. 74.

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Text	Script	Location	Buyer	Seller	Upper Side	Lower Side	1st short side	2 nd short side
E 225	SH	River plain	Zūzu son of Baʿal- malik	Ipqi- Dagan son of Baʿal- malik	NG	NG	NG	NG
Hirayama 16	S	Rabban	Abī-ra son of Birkali	Aḫī-ḫa son of Benti	Ba'al-malik son of Re'û	Itūr-ilu son of Dagan- ma	City	Ia'nu-Dagan son of Bāba (barber)
RE 16	S	Rabban	Bulalu son of Ilī- abu	NINURTA	Amur-ša son of Abba (son of Dādī)	Sons of Ipqi-ilī, Sons of Dagan-tāri'	Išbi-bēlu	Field of Tūra- Dagan
RE 51	SH	Rabban	Amzaḥi son of Dagan- kabar son of Eḫlia	Hinnu- Dagan, Aḥī-malik, Šurši- Dagan sons of Dagan- kabar son of Ehlia	Tūwana son of Kuttabu	Amzahi son of Dagan- kabar	Amzaḫi son of Dagan- kabar	Amzaḫi son of Dagan- kabar
SMEA 30 4	S	NG	Itūr- Dagan son of Ḥinnu- Dagan	NINURTA	NG	NG	NG	NG
TBR 51	S	Rabban	Milki- Dagan son of Bēlī- līmi, Ibni- Da(gan) son of Abī- ḫa(mis)	Zū-Baʿla son of Abī- ḫa(mis)	NG	NG	NG	NG

Table 3

a) Location

Specific areas of the Emar landscape were dedicated to viticulture separated from areas where the cultivation of cereals was carried out.¹⁵ Only a few geographical or topographical references are documented in vineyard sale contracts.

The town of Rabban was particularly suitable for viticulture because eight out of the fifteen purchased vineyards were located there. Prices per square $ik\hat{u}$ of vineyards located in Rabban can be calculated in four sale contracts (E 138b, Hirayama 16, RE 16, RE 51): despite their wide range, only the price per square $ik\hat{u}$ in E 138b, 29,268 sh., is significantly lower than the others (RE 16: 187,826 sh.; RE

15. Mori 2003, 137-138.

51: 216 sh.; Hirayama 16: 300 sh.). ¹⁶ In E 138 Iṣṣur-Dagan brother of the king Pilsu-Dagan purchases several properties –a field, a vineyard and a *tugguru*-building– each of which records a price per unit area below average. ¹⁷ Transactions in E 138 were carried out during a year of distress; although the price analysis has shown that there is no significant difference between normal times and times of crisis ¹⁸, the presence of the "year of distress" formula may occasionally underscore that sellers were facing economic difficulties. ¹⁹ Therefore, it is likely that the low price of the vineyard sold in E 138b was related to a period of hardship and it does not reflect the real value of the vineyards located in Rabban.

Two other villages in the vicinity of Emar are mentioned as locations of vineyards: Rabi (E 11), which is unknown elsewhere, and Uri (E 90) that is found as location of some properties: a field sold for a very low price (TBR 38)²⁰, a KI.KÁ plot (JCS 40 2)²¹ and a house (E 80A-B). It is worth noting that the vineyard in Uri records a higher price per square $ik\hat{u}$ (360 shekels) than those located in Rabban. The prices of two vineyards situated in the river plain, raqqatu (BLMJ 5, E 225), are unknown but fields with the same location were sold for high prices.²² The Euphrates runs along the second short side of the vineyard sold in E 3 but the price per square $ik\hat{u}$ cannot be calculated.²³

b) Contracting parties

This section is dedicated to the study of persons and institutions involved in the vineyard sale contracts. Seven out fifteen transactions are carried out between private citizens (BLMJ 9, E 89, E 90, E 120, Hirayama 16, RE 51, TBR 51) while in eight sales the Emar institutions –royal family, Zū-Baʿlaʾs family and the temple authority Ninurta– are involved. None of the private citizens appears in more than one transaction as either buyer or seller.

Members of the royal family are involved in two documents. In BLMJ 5 a vineyard is sold by the king Pilsu-Dagan to his nephew Puašata²⁴ but the purchase price is unknown. In the aforementioned E 138 the buyer is Iṣṣur-Dagan son of the king Baʻal-kabar and brother of Pilsu-Dagan. As seen above the low price per square $ik\hat{u}$ in E 138 was likely influenced by economic hardship. Members of the royal family also appear in the lists of adjoining properties: the king Baʻal-kabar I is quoted in E 1, his son Pilsu-Dagan is the owner of a vineyard in E 3a and Iṣṣur-Dagan owns a real property adjoining the vineyard he bought in E 138. It is worth noting that all these possessions were located in Rabban and that royal family members owned other parcels of land in the same village as is clear from the lists of adjoining properties in field sale contracts (ASJ 14, RE 2, RE 5, TBR 2, TBR 11). It is evident that the royal family was strongly tied to Rabban where it was one of the major landholders.

- 16. The surface area of the vineyard sold in E 138b (1,708 sq. $ik\hat{u}$) is larger than those of the other vineyards located in Rabban that range from 0,083 (RE 51) to 1,167 (E 3a) sq. $ik\hat{u}$.
 - 17. Viano 2010, 277, Table 3, Viano 2012, 141-142.
- 18. Viano 2010, 268, Viano 2012, 125-126. It is not precluded that this picture is to be modified when all data will be available.
- 19. Cf. Viano 2010, 266, Viano 2012, 120. The price of the filed sold in E 138 was probably influenced by its location as well, Viano 2010, 263.
 - 20. Cf. Viano 2010, 262.
 - 21. See below.
 - 22. Viano 2010, 263; the raqqatu was formed by a particularly sought after type of soil, Reculeau 2008, 138.
 - 23. The Euphrates also adjoins the vineyard listed in E 168e.
 - 24. Puašata purchases other properties in the same contract, see Viano 2012, 120.
 - 25. See Viano 2010, 279-283, Table 4.

Ninurta and the Elders appear as sellers in five vineyard sale contracts (E 1, E 3a, E 11, RE 16, SMEA 30 4) but merely for two transactions (E 11, RE 16) purchase prices are known. These documents record the second and the third lowest price per square $ik\hat{u}$ in vineyard sale contracts (RE 16: 187,826 sh.; E 11: 200 sh.). The price per square $ik\hat{u}$ cannot be calculated in E 3, but it can be argued that it was rather low because a vineyard of 0,194 square $ik\hat{u}$ and a field of 1 square $ik\hat{u}$ are sold for a full price of only 150 shekels of silver. Nevertheless these figures cannot be assumed as evidence of low evaluation of the vineyards sold by Ninurta and the Elders because as argued above the purchase price in E 11 is unclear and the average price per square $ik\hat{u}$ in vineyard sales is poorly indicative. Moreover, Ninurta's sales of other real properties usually record high prices. In three documents (E 1, E 11, RE 16) Ninurta and the Elders expropiated vineyards as a consequence of crimes committed by the owners. In RE 16 Amur-ša son of Abba²⁷ was expropriated of his houses and fields²⁸ but the document records the sale of a single vineyard. Because the list of adjoining properties clearly indicates that Amur-ša owned another vineyard, it is unclear whether this vineyard was included in the properties confiscated by Ninurta or whether Amur-ša retained some assets after the expropriation.

One of the Emar most active citizens in the real estate market was Ir'am-Dagan son of Illatu who appears as buyer of several properties (E 2, E 3, E 4, TBR 5)²⁹ including a vineyard (E 3a). All these documents are Ninurta's sales and except TBR 5, which stems from the market, they were found in a jar excavated in the so-called palace.³⁰ Ir'am-Dagan likely belonged to a family of wealthy landowners that was strongly connected to the local institutions, Ninurta and the Elders, and was based in Rabban, as E 2 and E 3 record properties purchased in that town. It is perhaps not a coincidence that the jar where the Ir'am-Dagan's dossier was stored contained other Ninurta's documents. The low price that was possibly recorded for the vineyard sold in E 3a should not be regarded as a result of the relation between Ir'am-Dagan and Ninurta, because in the other documents of the same dossier prices are above average.³¹ Therefore, there is no evidence that Ir'am-Dagan's family obtained favourable prices in Ninurta's sales.

Contracting parties recorded in the remainder of the vineyard sales written on Syrian type tablets are very seldom attested in the Emar documentation. The seller in BLMJ 9, Iphur-Dagan son of Baʻal-bēlu, appears as buyer of a field³² and an ^{KI}*erṣetu*-plot in two Ninurta's sales (TBR 2 and TBR 1). Both the vineyard sold in BLMJ 9 and the field purchased in TBR 2, which is one of the most expensive in the Emar sale records³³, were located in Rabban; we may therefore surmise that he was a wealthy landowner based in Rabban. The purchase price in BLMJ 9 is above average but unfortunately the price per square $ik\hat{u}$ cannot be calculated. It is likely that also the buyer, Rašap-abu son of Abī-kāpī was an eminent citizen of Emar because he appears in the witness list of several deeds (E 144, RE 14, RE 16, RE 52).

The seller in TBR 51, $Z\bar{u}$ -Ba'la son of $Ab\bar{\imath}$ - $\hbar a$ (mis), is probably brother of one of the buyers, Ibni-Da(gan) son of $Ab\bar{\imath}$ - $\hbar a$ (mis) who purchases the vineyard jointly with Milki-Dagan son of $B\bar{e}I\bar{\imath}$ - $I\bar{\imath}$ mi. One third of the vineyard was bought by Ibni-Da(gan) for Iosh. while the two-thirds were purchased by Milki-Dagan for Iosh. The purchase price is rather low but because the price per square $ik\hat{u}$ cannot be calculated

- 26. Ibid., 266-267, Viano 2012, 124-125.
- 27. The buyer is unknown elsewhere in the Emar documentation.
- 28. Cf. RE 16, 13-15, ki-mu-ú hi-tì-šu // ša i-pu-uš É.ḤI.A ʿA.ŠÀ.ḤI.A ʿ// a-na d̄ NIN ʾ.URTA ʿid ʾ-d[i-i]n, "because of the crime he committed he gave his houses and fields to Ninurta".
 - 29. Viano 2010, 266, Viano 2012, 142.
 - 30. Rutz 2013, 59-64.
 - 31. For E 2 see Corrigenda below, for E 4 see Viano 2010, 277, Table 3, for TBR 5 see Viano 2012, 141-142.
 - 32. Viano 2010, 275.
 - 33. Ibid., 260, Figure 1, 264, Table 1.

there is no clue for understanding if the transaction was influenced by the possible kinship between the seller and one of the buyers. It is not precluded that the vineyard purchased in this text is the same as the one mentioned in the Ibni-Da(gan)'s testament (TBR 50). Other parties documented³⁴ in the Syrian vineyard sales are unknown elsewhere.

Five Syro-Hittite vineyard sale contracts are preserved, three of which (E 120, E 225, RE 51) are carried out between brothers and include the formula $k\bar{t}$ / kima nikari. In E 120, which dates to the last generation of Milki-Dagan's archive³⁶, Ba'al-qarrād son of Aḥī-Dagan son of Milki-Dagan sold for 50 sh. his share of a house and a vineyard to his brother Milki-Dagan. The purchase price is rather low but it should be considered that it does not refer to the entire property but only to Ba'al-qarrād's share. In E 225 the son of the diviner Ba'al-malik, Zūzu, purchases several real properties from his brother Ipqi-Dagan. The purchase price, which refers to a vineyard, a house and other properties, is not fully preserved, [x me-at] 15 GÍN. In RE 51 Amzaḥi son of Dagan-kabar buys from his brothers, Ḥinnu-Dagan, Aḥī-malik and Šurši-Dagan, their shares of a vineyard. With this purchase Amzaḥi intended to expand his presence as landholder in Rabban since three of the four properties adjacent to the purchased vineyard already belonged to him. I suggested elsewhere that low prices recorded in the kima nikari texts can be associated to their late date, when there is evidence for decrease in price level of the real estate market. However, because only for RE 51 the price per unit area can be calculated there is nearly no insight for understanding factors determining prices of vineyards in sale contracts containing the kima nikari formula.

Two other Syro-Hittite vineyard sales are known. In E 90 Rībi-Dagan son of Abī-li'mu buys from Putuḥulaši son of Ilī-aḥī a vineyard located in Uri for the second highest price per square $ik\hat{u}$, 360 shekels of silver. Although Rībi-Dagan is unknown elsewhere, it can be suggested that he was a wealthy citizen. The seller can be perhaps identified with one of the witnesses of E 215, albeit no patronymic is preserved in this document: at Emar the name Putuḥulaši is only attested in these two texts. E 89 is the only case of a woman, Al-aḥāti, selling a vineyard. This transaction records the highest price per square $ik\hat{u}$ in the Emar vineyard sale contracts. By contrast, price level of fields and buildings sold by women is low because those sales were likely carried out under pressure of debts. Therefore, it appears that in E 89 no economic hardship was incumbent upon the seller.

To conclude, due to the paucity of sources for vineyard sale contracts as well as the limited number of prices per square $ik\hat{u}$ that can be actually calculated, there is no clue for understanding if some people influenced trades of this type of rural land.

c) Sales under special conditions

Three Syrian vineyard sale contracts were carried out during years of famine and war (BLMJ 9, E 138b, and Hirayama 16). The prices per square $ik\hat{u}$, which can be only calculated for E 138b and Hirayama 16, differ so significantly from one another (E 138b = 29,268 sh.; Hirayama 16 = 300 sh.) that a clear trend is not discernible for vineyard sales during times of famine or crisis. As said above no significant variation in price levels can be detected between normal times and times of crisis but, as

- 34. E 11, Hirayama 16, RE 16, SMEA 30 4.
- 35. For this expression see Fijałkowska 2014, 158-160.
- 36. For this archive see Viano 2007, 254-257.
- 37. Contrary to the editor I regard Zūzu as the only buyer, see Viano 2012, 121 and n. 26.
- 38. Ibid., 139.
- 39. See ibid., 122.

suggested for E 138, sales including the "year of distress" formula were occasionally influenced by economic hardship.

A single document, E 90, contains a clause foreseeing redemption that was set, as usual, at the double $(TE\check{S}.BI)^{40}$ the purchase price. Some real estate sale contracts containing the redemption clause record low prices that likely depended on the seller's indebtedness.⁴¹ On the contrary there is no evidence that E 90 was carried out under pressure of debts because it records the second highest price per square $ik\hat{u}$.

For the Ninurta's sale SMEA 30 4, I elsewhere argued the possibility of a pre-emption right⁴²: this claim is based on the fact that Itūr-Dagan son of Ḥinnu-Dagan bought a house and a vineyard that Ninurta had confiscated from his brother Ṣillu-Dagan. It seems likely that the Emar social rules foresaw for families the right of redeeming expropriated assets.

d) Price fluctuation

Contrary to field and building sale contracts, a diachronic analysis of price fluctuation of vineyards cannot be satisfactorily carried out because of the scarcity of sources for this type of agricultural land. However, relevant outcomes could ensue from the chronological placement of vineyard sale contracts.

Text	Script	Price	Price per sq. ikû	Date
RE 16	S	120	187,826	Iași-Dagan
BLMJ 9	S	100		Ba'al-kabar(?)
E 1	S			Baʿal-kabar I
E 11	S	100	200	Abbanu
E 3a	S			Abbanu
BLMJ 5	S			Pilsu-Dagan
E 138b	S	50	29,268	Pilsu-Dagan
Hirayama 16	S	200	300	Pilsu-Dagan
TBR 51	S	43		Pilsu-Dagan
SMEA304	S			Elli
E 89	SH	15,5	558	?
E 90	SH	60	360	Laḫeya
E 225	SH			Zūzu son of Ba'al-malik
E 120	SH			Aḫī-malik <i>Ugula</i>
RE 51	SH	18	216	Aḫī-malik <i>Ugula</i>

Table 4

e) A few notes on chronology

TBR 51: The text is dated to Pilsu-Dagan because another document of the same dossier, TBR 50, was written by Mašru-ḥamis, a scribe working under Pilsu-Dagan.

E 90: The first witness is the overseer of the land Laheya, predecessor of Ahī-malik.

^{40.} For TEŠ.BI as price plus its equivalent see Zaccagnini 1996, cf. remarks in Westbrook 2001, 28 n. 11.

^{41.} Cf. Viano 2012, 126-127, 154.

^{42.} See ibid., 125.

- E 120: The family of Milki-Dagan can be synchronized with the overseer of the land Ahī-malik⁴³ but the text cannot be clearly placed within the timeframe of his career.
- E 225: The text was likely written before $Ah\bar{\imath}$ -malik had assumed the role of overseer because the scribe, Šaggar-abu, is the same as in TBR 24, a document that $Ah\bar{\imath}$ -malik sealed without the title of Ugula.
- RE 51: The text can be synchronized with TBR 43 a document belonging to the dossier of Apili through Bēlu-malik son of Baia who sealed both deeds. TBR 43 can be dated to the time of the overseer of the land Aḫī-malik because one of the witnesses, Dagan-qarrād son the diviner Matkali-Dagan⁴⁵, is quoted as owner of a house in RE 12 whose first witness is Ahī-malik.

The analysis of prices in real property sales (fields, houses, $^{KI}erset\bar{u}$) has shown that the price level in Syro-Hittite documents is usually lower than in contracts of the Syrian tradition. Unexpectedly, the highest prices per square $ik\hat{u}$ of vineyards are attested in the Syro-Hittite records. However, it is not precluded that the contract registering the highest price per square $ik\hat{u}$, E 89, was written in the period when the two scribal traditions overlapped, because it cannot be clearly dated. To conclude there is no clue for understanding why the trend of price fluctuation diverges between vineyard sale contracts and sales of other types of real property.

2. Orchard sale contracts

Orchards are denoted in the Emar texts by the Sumerogram KIRI₆.NUMUM with the exception of AuOr 5 3 and perhaps E 82 where the shortened form KIRI₆ is adopted.⁴⁷ This type of agricultural land seldom appears as the object of sales, as only five Syrian and three Syro-Hittite orchard sale contracts are preserved. The total number of orchards documented in sales is unclear because in E 82 the quantity is unspecified ([KIRI₆].MEŠ). The list of real properties E 168 contains three orchards and another one is likely listed in the upper broken part of the same tablet. An orchard is also registered in a donation bill (Hirayama 20). In three instances orchards are sold together with other properties as is clear from Table 5.

Text	Script	Sold Property
AuOr 5 3	S	1 orchard
BLMJ 8	SH	1 orchard
E 82	SH	orchards – 1 field – 1 <i>tugguru</i>
E 137	S	2 orchards – 1 field – 2 <i>erṣetu</i> -plots
E 140	S	1 orchard
E 151	S	1 orchard
E 154	S	1 orchard – 1 <i>ḥablu</i> -building
E 206	SH	½ orchard

Table 5

- 43. See Viano 2007, 256, with previous bibliography.
- 44. Cf. Cohen 2012, 16.
- 45. For this person see Cohen 2009, 39.
- 46. Viano 2010, 273-275, Viano 2012, 135-139, 157-160.
- 47. According to Mori 2003, 134, the nature of the property in AuOr 5 3 is unclear.

Due to the small surface of orchards, measurements are usually expressed in $\check{s}iddu$ and GI but for the sake of comparison with fields and vineyards surface areas are calculated in square $ik\hat{u}$ in Table 6. In bold are indicated sales providing purchase prices.

Text	Script	Location	Measurements	Surface	Price	Square ikû price	Buyer	Seller
AuOr 5 3	S	?	?	?	?	?	PN	NIN
BLMJ 8	SH	In front of the gate of Ninkurra	L: 15 GI W: 14 GI	0,015	30	2057,143	ZF	PN
E 82	SH	NG	NG	?	?	?	PN	PN
E 137a	S	Irrigation district of Yardānāt u	L: [] <i>šiddu</i> 2 GI W: [] <i>šiddu</i> 3 GI	?	?	?	RF	PN
E 137b	S	Irrigation district of Yardānāt u	L: 1 ikû W: 1 šiddu	0,167	20	120,000	RF	RF
E 140 ⁴⁸	S	Irrigation district of Dagan- bēl-nabî- ilsi	L1: 3 šiddu 3 GI L2: 3 šiddu 3 GI W1: (3) šiddu 3 GI W2: 3 šiddu 5 GI	0,291	100	343,716	RF	PN
E 151	S	?	?	?	60	?	PN	NIN
E 154	S	?	?	?	?	?	?	NIN
E 206	SH	Irrigation district of Yardānāt u	L: 3 šiddu W1: 2 šiddu 7 GI W2: 1 šiddu	0,070 ⁴⁹	100	1432,836 ⁵⁰	ZF	PN
Average				0,135	62	988,424		

Table 6

Orchard surfaces in sale contracts range from 0,015 to 0,291 square $ik\hat{u}$. Purchase prices are preserved for only five sales and range from 20 to 100 sh. with an average of 62 shekels. Prices per square $ik\hat{u}$ can be calculated for only four orchards and range from 120 to 2057,143 sh. with an average of 988,424 shekels of silver. This figure is obviously influenced by the high prices per square $ik\hat{u}$ registered in BLMJ 8 and E 206 as well as by the very restricted number of orchard sales. As with vineyards the average price per square $ik\hat{u}$ is poorly indicative. For each sold orchard Table 7 indicates location, buyer

^{48.} Contrary to Mori's reconstruction the orchard sold in E 140 must be an isosceles trapezoid because the upper and lower sides have the same length while the first and second "short" sides have different measures.

^{49.} This figure refers to half of the orchard surface which is the sold part.

^{50.} This price is calculated on the basis of the sold surface area, see 2b).

and seller as well as the owners of the adjoining properties. The members of the Emar royal family are indicated in bold.

Text	Script	Location	Buyer	Seller	Upper Side	Lower Side	1st short side	2 nd short side
AuOr 5 3	S	?	Hinna-Baʻal son of Abī- šumuḫ	NINURTA	[]	[]	[]	[]
BLMJ 8	SH	In front of the great gate of Ninkurra	Baʿal-qarrād son of Zū- Baʿla	Izrīya and Asda-aḫī sons of Niqala	Zū-Ea son of Aḫī- malik	Road of Ninkurra	Ditch in front of the gate of Ninkurra	Işşur-Dagan
E 82	SH	NG	Dagan-talih son of Hima	Baʿal- na[]	NG	NG	NG	NG
E 137a	S	Irrigation district of Yardānātu	Işşur- Dagan	Zū-Baʻla son of Lulu	Abia son of Dagan-li	Ibnia son of Abī-ka, Aḫī-malik son of the King	Orchard of Udha	Işşur-Dagan brother of Pilsu-Dagan
E 137b	S	Irrigation district of Yardānātu	Işşur- Dagan	Pilsu- Dagan	Sons of Eḫli-kuša	Aḫī-malik son of the king	Burāqu son of Nana	
E 140	S	Irrigation district of Dagan- bēl-nabî- ilsi	Işşur- Dagan son of Baʿal- kabar	Taḫḫu son of Ḥabru	Orchard of Udḫa	Broad Road	Ibnia son of Abī-ka(pi)	Sons of Ikū- Ra(šap) son of Riḫṣu
E 151	S	?	Ba'al-bēlu	NINURTA	[]	[]	[]	[]
E 154	S	?	?	NINURTA	[]	[]	[]	[]
E 168b	SH	Gate of [Ninkurra?]	Niqala son of Asda- aḫī ⁵¹	-	Işşur- Dagan son of Baʿal- kabar	?	Sons of Zūzānu	Road of Ninkurra
E 168c	SH	Irrigation district of Yardānātu	?	-	?	Sons of Igmulu	Işşur-Dagan son of the king	Attiya son of Dādu
E 168d	SH	the great gate	?	-	Aḫī-malik son of the king	Işşur- Dagan son of the king	Abba son of the king	Aḥi-malik son of the king
E 206	SH	Irrigation district of Yardānātu	Baʿal-qarrād son of Zū- Baʿla	Išbi-Dagan and Ikmu- Dagan sons of Zū-Baʿla son of Igmulu	[]	[]	Işşur-Dagan son of the king	Attiya son of Dada

Table 7

^{51.} This is not the buyer because E 168 is a list of properties with their owners.

a) Location

Location is known for eight out of twelve orchards. In six instances orchards are situated in the vicinity of a KÁ, literally "gate", that has been interpreted by Durand⁵² as irrigation district, a place where water was accessible. Therefore, KA must be distinguished from urban doors that are indicated by the logogram KÁ.GAL⁵³ which is attested in two occasions, BLMJ 8 and E 168d.⁵⁴ This view has been questioned by Mori⁵⁵ who showed that the two terms are occasionally interchangeable. According to Mori⁵⁶ orchards were situated in peripheral areas of the city in the proximity of city gates as is the case with BLMJ 8 and E 168d. Moreover, Mori⁵⁷ distinguishes between the expressions ina/ana pāni KÁ/KÁ.GAL, used for orchard locations, and ina KÁ attested in field locations. The former could refer to physical structures, gates (to be translated as "in front of the gate"), whereas the latter is to be understood as "in the water district". However, this does not apply to all orchard locations. Mori's differentiation between Yardānātu gate written with divine determinative⁵⁸, found as location of four orchards (E 137a, E 137b, E 168c, E 206), and Yardānu without divine determinative, where several fields were located, cannot hold because the divine determinative does not appear in E 168, 8, KIRI₆.NUMUN a-na pa-ni KÁ Wa-ar-da-na-ti₄. ⁵⁹ Therefore, the two names should refer to the same geographic reality, likely a wadi area south-east of Emar. 60 Following Reculeau's suggestion that the singular form, Yardanu, refers to a major wadi, whereas the plural, Yardānātu, denotes two smaller ones, it appears that fields were located next to the main wadi, while orchards were situated by the surrounding small ones. This pattern follows the organization of the Emar agricultural landscape that sees orchards and vineyards cultivated in specific environments separated from fields although close-by areas could have included different types of cultivation.

As pointed out by Reculeau orchards were located "in the immediate vicinity of Emar, in what could be described as a peri-urban horticulture ring". ⁶¹ It seems therefore that the cultivation of orchards covered an area from the proximity of the city gates (BLMJ 8 and E 168d) up to slightly more distant zones such as the Yardānātu-wadi.

Because very limited data are available for orchards, prices and locations cannot be correlated to each other. However, one may note that the highest price per square $ik\hat{u}$ is recorded for an orchard adjacent to a city gate (BLMJ 8) and that prices of orchards located in the same area may vary consistently (E 137b and E 206).

b) Contracting parties

Unusually for sale contracts, the royal family is frequently involved in the orchard market. Iṣṣur-Dagan son of Ba'al-kabar purchases three orchards (E137a, E 137b and E 140). The low price per square $ik\hat{u}$ recorded in E 137b is likely associated to the kinship between the contracting parties as the seller is the

- 52. Durand, Marti 2003, 144-145.
- 53. Reculeau 2008, 133.
- 54. The orchard E 168d likely had the same location as BLMJ 8, the gate of Ninkurra, see Mori 2003, 142 and n. 114.
- 55. Mori 2010.
- 56. Mori 2003, 138-140.
- 57. Mori 2010, 259-260.
- 58. For this name as a divinized natural phenomenon see Reculeau 2008, 134, 136-137.
- 59. For Yardānātu/Wardānātu see Pentiuc 2001, 86-87.
- 60. Reculeau 2008, 136-137.
- 61. Ibid., 137.

king and Iṣṣur-Dagan's brother, Pilsu-Dagan. Iṣṣur-Dagan and his brother Aḥī-malik also own properties adjacent to the orchard purchased in E 137a. As indicated in Table 7, members of the royal family frequently appear in the lists of adjoining properties in orchard sale contracts. Notably, all the real properties adjacent to the orchard E 168d belong to the sons of the king Ba'al-kabar —Iṣṣur-Dagan, Aḥī-malik and Abba. It is perhaps worth noting that the orchards purchased by Iṣṣur-Dagan in E 137b and E 140 are the largest attested in the Emar sale contracts. The number of orchards owned by members of the royal family is presumably associated to the high value of this type of agricultural land. Orchards belonging to the royal family were situated in different locations, either adjacent to the city gates (E 168b, E 168d) or in the immediate outskirt of the city (E 137a, E 137b, E 140, E 168c, E 206) with a particular concentration in the Yardānātu district (seven properties).

Ninurta and the Elders appear as sellers only in three transactions (AuOr 5 3, E 151, E 154⁶²). In these documents the prices per square $ik\hat{u}$ cannot be calculated and locations are unknown. Aside from royal family members, no contracting parties are attested in more than one Syrian orchard sale contract and none of them is known elsewhere in the Emar documentation.

Buyers attested in the Syro-Hittite sales are very well known. The diviner Ba'al-qarrād son of Zū-Ba'la purchases two orchards (BLMJ 8 and E 206) from two otherwise unknown sellers. These transactions record the highest prices per square $ik\hat{u}$ in the orchard sale contracts, but no clear explanation can be offered. The orchard sold in E 206 belongs to the sons of Igmulu, likely a clan name, but only half of it, representing the inheritance share of Išbi-Dagan and Ikmu-Dagan sons of Zū-Ba'la son of Igmulu, is actually sold in the contract. This orchard is likely the same or part of E 168c, but shapes and adjoining properties are here regarded as different from Mori's reconstruction⁶³ (Figure 2).

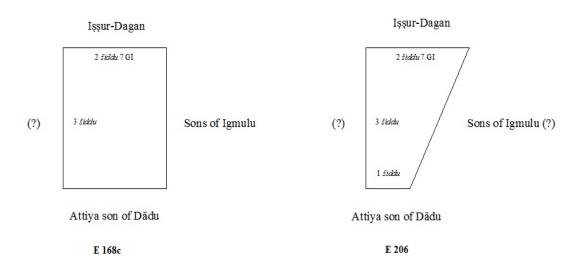


Figure 2

^{62.} The names of Ninurta and the Elders are unpreserved in the small fragment E 154 but their presence is assured by the reference to *hitu* "crime".

^{63.} Mori 2003, 143.

According to grammar and general pattern of sale contracts, measurements in E 206 refer to the entire orchard and not to its half which is the sold part. However, disregarding the grammar of the text, I wonder if the scribe actually intended providing the measurements of the sold part. This would provide a better understanding of the difference in sizes between E 168c and E 206⁶⁵ that otherwise remains unexplained. had been described by the difference of the sold part.

The document E 82 belongs to the archive of Hima: Dagan-talih son of Hima buys several real properties including some orchards for only 10 shekels. As I argued elsewhere,⁶⁷ the seller was an indebted widow, Ba'al-na[...]. Her economic distress is underscored by the presence of a clause that sets out her right to redeem the orchard although the price of redemption is unpreserved.

The limited data available for orchard sales prevent us from clearly understanding factors determining prices. We may notice that prices per square $ik\hat{u}$ are extremely elevated and that the royal family represented the major landowner.

c) Price Fluctuation

As with vineyard sales, the limited number of orchard sale contracts does not enable us to carry out an adequate analysis of price fluctuation. Nevertheless a chronological placement of texts could be meaningful.

Text	Script	Price	Price per sq. ikû	Date
AuOr 5 3	S			First Dynasty – Irīb-Baʿal/Igmil-Dagan
E 137a	S			Pilsu-Dagan
E 137b	S	20	120	Pilsu-Dagan
E 168b	SH			Pilsu-Dagan/Elli
E 168c	SH			Pilsu-Dagan/Elli
E 168d	SH			Pilsu-Dagan/Elli
E 140	S	100	343,716	Elli
E 151	S			?
E 206	SH	100	1432,836	Baʻal-qarrād son of Zū-Baʻla
BLMJ 8	SH	30	2057,143	Baʻal-qarrād son of Zū-Baʻla
E 82	SH			Family of Ḥima (1st generation)

Table 8

3. A few notes on chronology:

AuOr 5 3: some witnesses are documented in texts dated back to the first dynasty including Abī-Dagan son of Dagan-tariḫ who appears in TBR 14, drafted under Irīb-Baʿal, and in TBR 15, RE 91 and Hirayama 2, written under Igmil-Dagan.

- 65. In such case *mišlum* should not be read literarily as "half" but rather as "part".
- 66. The price per square $ik\hat{u}$ would be 716,418 sh.
- 67. Viano 2012, 142.

^{64.} E 206, 9-14, KIRI₆.NUMUN *an-ni-tu*₄ *ša* DUMU.MEŠ ^m*Ig* '-*mu*!-*li*! // *iš-tu li-it* ^m*Iš-bi*-^dKUR *ù* ^m*Ik-mu*-^dKUR DUMU ^m*Zu-ba-la* DUMU *Ig-mu-li mi-ši-il* KIRI₆.NUMUN 2 ḤA.LA.MEŠ-*šu-nu* ^{md}IŠKUR.UR.SAĜ DUMU ^m*Zu-ba-la* LÚ.ḤAL *a-na* 1 *me-at* KÙ.BABBAR *a-na* ŠÀM *il-qì*, "this orchard belongs to the sons of Igmulu; from Išbi-Dagan and Ikmu-Dagan sons of Zu-Baʿla son of Igmulu, half of the orchard, their two shares, Baʿal-qarrād son of Zu-Baʿla purchased for 100 silver shekels".

E 168⁶⁸: this Syro-Hittite text lists properties with their owners. The late part of the reign of Pilsu-Dagan should be taken as the *terminus post quem* for this tablet because the field E 168f (E 168, 24-28) is the same as that purchased by Iṣṣur-Dagan in E 137c⁶⁹, a deed dated to the time when Elli was the crown prince since he appears as second witness after his father. Because Iṣṣur-Dagan and his brothers are mentioned several times in E 168 it is probable that they were alive when the text was written. Therefore E 168 can be placed not too long after E 137 and it can be approximately dated to a period between the end of the reign of Pilsu-Dagan and the reign of his son Elli.

E 206: This text has provided the synchronism between the diviner Ba'al-qarrād and Iṣṣur-Dagan who appears in the list of adjoining properties. As mentioned above the orchard E 168c is the same as the one bought by Ba'al-qarrād in E 206, but because E 168 does not mention the owner of this property it is unclear whether E 206 precedes or follows E 168. Cohen and D'Alfonso⁷¹ synchronize Ba'al-qarrād only with Elli, but in light of the relation between E 168 and E 137, Ba'al-qarrād's chronology likely extended to the late part of Pilsu-Dagan's reign. As mentioned above the diviner Ba'al-qarrād and Iṣṣur-Dagan and I

As mentioned above, the Syro-Hittite real property sales usually record lower prices compared to the documents of the Syrian tradition. By contrast, in vineyard sale contracts the highest prices are documented in the Syro-Hittite sales and the same is found in orchard sales. It is unclear whether this depends on the peculiarity of the orchard market or on the dearth of Syro-Hittite sale contracts that may have influenced our understanding. Another explanation should be taken into account. The only Syro-Hittite orchard sale contracts for which the price per square $ik\hat{u}$ can be calculated, BLMJ 8 and E 206, belong to Ba'al-qarrād's archive who, as seen above, is likely to be synchronized with Elli and Pilsu-Dagan. Therefore, because it is not precluded that these two texts were written when the Syrian scribal tradition was still productive they would not witness an increase of orchard prices toward the end of Emar history.

3. Other land sale contracts

A not clearly identified plot of land termed as KI.KÁ, literally "the place of the gate", is the object of two sale contracts from Emar, JCS40 2 (=Hirayama 4) and BLMJ 7.73 Huehnergard tentatively suggested

- 68. For the date of this text see ibid., 133-134.
- 69. E 137b and E 168a in Mori 2003, 129.
- 70. Cohen, D'Alfonso 2008, 16. Di Filippo 2008, 57-61, rejects this synchronism by arguing that references such as the lists of adjoining properties cannot be used as evidence for synchronisms because they may actually refer to earlier right-holders who were already dead. Di Filippo based his argument on the incongruences between owners and sellers recorded in E 206: in line 9 the orchard is indicated as belonging to the sons of Igmulu but the sellers are Išbi-Dagan and Ikmu-Dagan sons of Zū-Ba'la son of Igmulu; hence according to Di Filippo only Išbi-Dagan and Ikmu-Dagan were contemporary to Ba'al-qarrād. Although it is possible that the lists of adjoining properties include early owners, especially in E 168, it is to be noticed that the reference "Sons of Igmulu" may generally refer to Igmulu's offspring and does not exclude Igmulu's grandsons. In my opinion there is no clue for understanding whether Işşur-Dagan, who is mentioned in the list of adjoining properties of E 206, was alive when the text was written; as a consequence, for the time being, I would prefer to maintain the synchronism. For further criticism on Di Filippo's chronology see Viano 2012, 134.
 - 71. Cohen, D'Alfonso 2008, 18.
 - 72. Cohen 2013, 290, seems to take the same stance.
 - 73. The list of adjoining properties in the field sale TBR 3 mentions another KI.KÁ.
 - 74. See Beckman 1988, 66 n. 15.

that KI.KÁ might be an error for KI.KAL (kislàḥ) = maškanu "threshing floor." Following Huehnergard's suggestion, Mori⁷⁵ regarded KÁ as a mistake for LAḤ4 that is attested in TBR 63; hence she interpreted both KI.KÁ and KI.LAḤ4 as anomalous forms of kislaḥ (KI.LAḤ) = maškanu, "threshing floor." However, in light of the above-mentioned interpretation of KÁ as "irrigation district", it is likely that KI.KÁ refers to that geographic entity and, therefore, it should be regarded as the place where water was actually accessible. Conversely, KI.LAḤ4 in TBR 63 was probably a different type of land, either a "threshing floor" or as suggested by Arnaud⁷⁶ an arid land, nābalu (KI.LAḤ.A).⁷⁷ A kislaḥ, "threshing floor", annexed to a tugguru-building is sold in TBR 20. Another multiple sale is BLMJ 7 that in addition to a KI.KÁ plot includes a house, a tugguru-building and some fields.

Text	Script	Object	Measurements	Price	Date
BLMJ 7	S	KI.KÁ	NG	?	Elli
JCS 40 2	S	KI.KÁ	L: 1 sarma 'u (?)	15	Elli
			W: 1 šiddu		
TBR 20	SH	KISLAḤ	NG	?	Kili-Šarruma son of Mutri-Teššub
TBR 63	S	KI.LAH ₄	NG	14	Igmil-Dagan (1st dynasty)78

Table 9

Syrian-type tablets are the two KI.KÁ sales BLMJ 7 and JCS 40 2 that were written under Elli as well as the contract TBR 63 which is dated to the first dynasty. By contrast TBR 20 is a Syro-Hittite document belonging to the archive of Awiru that was sealed by Kili-Šarruma son of the overseer of the land Mutri-Teššub. The price per square $ik\hat{u}$ cannot be calculated for either of these contracts: in BLMJ 7 and TBR 20 the purchase prices (BLMJ 7: 200 sh.; TBR 20: 9 sh.) refer to all the sold properties; in JCS 40 2 and TBR 63 the surface areas are unknown.⁷⁹ Therefore, prices cannot be compared between these real properties and the other rural lands.

All the real properties listed in Table 10 are situated outside of Emar. In BLMJ 7 the KI.KÁ is placed in the irrigation district of the village of Yaššunu (*i-na* KÁ-*bi* ^{URU}*Ia-aš-šu-ni*) where two fields purchased in Hirayama 14 and RE 35 were located. ⁸⁰ The city of Uri, the location of the KI.KÁ sold in JCS 40 2, is mentioned in other sale contracts. ⁸¹ The location of the threshing floor purchased in TBR 20, the irrigation district of Amzaḥi son of Itūr-Dagan, is named after the seller of the property. ⁸² Two KI.KÁ plots (JCS 40 2 and TBR 3) ⁸³ and the plot sold in TBR 63 are located near a road.

In BLMJ 7 the buyer is a member of the royal family, Ba'al-malik son of Issur-Dagan while the seller Kāpu son of Lieda is not attested elsewhere in the Emar documentation. In JCS 40 2 the seller Kammūdu son of Amzahi owns two properties adjoining the sold KI.KÁ plot but he is not documented in other Emar

- 75. Mori 2003, 145-146.
- 76. Arnaud 1991, 109: 1, 17.
- 77. See CAD N, 20.
- 78. The text is dated to the year of Abī-Dagan son of Zū-Ḥalma who also appears as eponym in RE 91 in which Igmil-Dagan son of Irīb-Baʿal is the first witness.
 - 79. The unit of measurement sarma'u is unknown elsewhere, see Beckman 1988, 66.
 - 80. The testament RE 30 mentions another field located in the city of Yaššunu, see Mori 2003, 109, Table 2.
 - 81. TBR 38 (field), E 90 (vineyard), E 80A-B (house).
 - 82. For irrigation districts named after PN see Reculeau 2008, 134.
 - 83. For TBR 3 see fn. 73.

texts. Abdi-Išḫara son of Itūr-Baʻlu, who owns a real property adjoining the plot sold in TBR 63, is perhaps the son of the seller, Itūr-Baʻlu son of Ṣilla-Udḥa who is not attested elsewhere. The buyer in TBR 63, Abī-rašap son of Ḥinna-Baʻal, is the same individual quoted in TBR 18, a Ninurta's sale that was written at the time of the first dynasty, under Li'mi-šarru; in this document "the men of Abī-rašap", likely members of his clan purchased a field.⁸⁴ As mentioned above, TBR 20 belongs to the archive of Awiru's family.⁸⁵ In this contract Amzaḥi son of Itūr-Dagan son of Aḥī-mi, who is unknown elsewhere, sold his property to Arwu son of Awiru under pressure of debts.⁸⁶

Text	Tablet	Location	Buyer	Seller	Upper	Lower	1st short	2 nd short
					Side	Side	Side	Side
BLMJ 7	S	Irrigation district	Ba'al-malik	Kāpu son of	NG	NG	NG	NG
		of the city of	son of Işşur-	Lieda				
		Yaššuni	Dagan					
JCS40 2	S	Uri	Eḫla-kuša	Kammūdu	Kammūdu	Kammūdu	Mayanu	Road
			son of []-	son of	son of	son of		
			za	Amzaḫi	Amzaḫi	Amzaḫi		
TBR 20	SH	Irrigation district	Arwu son of	Amzahi son	NG	NG	NG	NG
		of Amzaḥi son	Awiru	of Itūr-				
		of Itūr-Dagan		Dagan son				
				of Aḫī-mi				
TBR 63	S	NG	Abī-Rašap	Itūr-Ba'lu	Zū-Anna	Abdi-	Broad	Iahmis-ilu
			son of	son of Şilla-	son of	Išḫara son	Road	son of Itūr-
			Ḥinna-Baʻal	Udḫa	Alaša	of Itūr-		libbu
						Baʻlu		

Table 10

In the Syrian document TBR 15 an entire tell, $DU_6 = tillu$, is sold by the city authorities; unfortunately the buyer's name is unpreserved as well as measurements and purchase price are unknown. The mound adjoins on the northern side a field located on the $b\bar{a}litu$ (a dead meander of the river)⁸⁷, a road on the southern side and an unspecified property belonging to a certain Ba'al-kabar on the first short side. The owner's name of the property adjacent to the second short side is unpreserved. The tablet is dated to the first dynasty at the time of Igmil-Dagan and is part of the so called "Arana documents", a group of texts alluding to tributes paid to the Hurrian king. As prices recorded in the other "Arana documents" are below average the mound in TBR 15 was probably sold for a low price. It is likely that these contracts document sales made in order to pay the tribute.

^{84.} Viano 2010, 267, 273.

^{85.} For this family see Viano 2007, 254-257 with previous bibliography.

^{86.} See Viano 2012, 142.

^{87.} For this term see Mori 2003, 115.

^{88.} For the "Arana documents" see Yamada 1993, Beckman 1996, Skaist 1998b, Skaist 1998a, 61-62. For sales in the "Arana documents" see Viano 2012, 149-150.

4. Rural land sale contracts: a comparison

Three types of lands suitable for agricultural cultivation are documented in the Emar sale contracts: fields, vineyards and orchards. Sales of fields represent the vast majority of transactions of agricultural lands at Emar while the number of vineyard and orchard sales is limited.

Property	Transactions	Average area	Average purchase price	Average price per square ikû
Fields	62	4,46	63,26	30,078
Vineyards	15	0,615	78,50	264,442
Orchards	9	0,135	62	988,424

Table 11

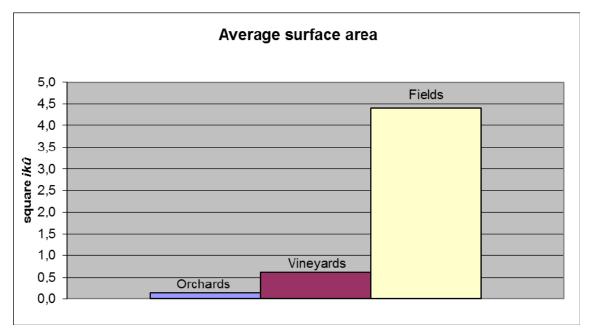


Figure 3

As shown in Figure 3 the agricultural lands with the largest surface area were fields whereas vineyards and notably orchards occupied very small parcels of land.

Nevertheless fields represented the less valuable type of land as clearly shown in Figure 4. Vineyards and orchards record higher prices per square $ik\hat{u}$ than fields. Particularly, orchards represent the most expensive type of agricultural land.

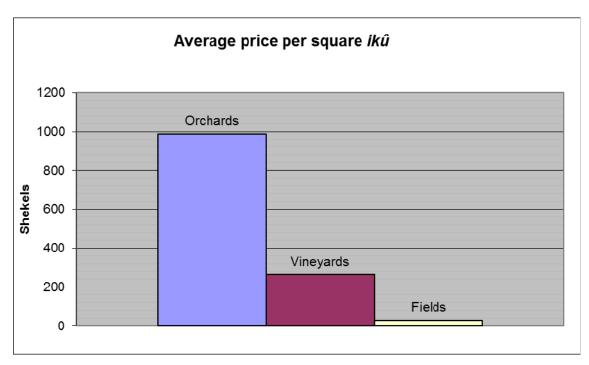


Figure 4

Values likely depend on foodstuffs cultivated in each type of land and on the availability of areas suitable for such cultivations. Fields for growing cereals required large plots of land situated outside the city which were easily available along the course of the Euphrates. On the contrary vineyards and orchards necessitate specific soils and locations with appropriate exposure to the sun and access to water that can be less easily available. Moreover, like nowadays, grapes, vegetables and fruits are more valuable and more expensive products than cereals. In this context it is not precluded that the limited number of vineyard and orchard sale contracts depends on the small quantity of these rural lands in the vicinity of Emar as well as on the tendency not to sell the most valuable agricultural lands.

As shown in Table 12, the largest market of agricultural lands at Emar is represented by field sales. The full volume of vineyard and orchard transactions is less than half that of fields.

Property	Spent silver
Fields	2593,5
Vineyards	706,5
Orchards	310

Table 12

5. Conclusions

Vineyard and orchard sale contracts provide less quantitative data compared to field sales, thus the analysis of prices often brings to inconclusive results. Nevertheless it is clear that vineyards and orchards were the most expensive agricultural lands. As usual for sales, most of the contracts are written according to the Syrian tradition, but several documents were drawn up in the Syro-Hittite style.

Texts provide evidence that these types of agricultural lands were concentrated in specific areas of the Emar landscape. In particular vineyards were mostly located in the village of Rabban. Joint data from vineyard and field sale contracts reveal that members of the royal family were large landowners in Rabban. The royal family is also the main owner of orchards. No clear-cut explanation can be accounted for such a dominant position that is in contrast with the rest of real property sales, but perhaps it was associated to the value of orchards. It is also worth noting that the prince Iṣṣur-Dagan bought the largest orchards attested in the Emar documentation. The role of Ninurta and the Elders in vineyard and orchard sales cannot be clearly detected whereas the presence of Zū-Baʿlaʾs family is limited to a single vineyard sale and two orchard sales.

Contrary to field, house and KIerṣetu sales the highest prices of vineyards and orchards are unexpectedly attested in the Syro-Hittite documents. However at the present state of research it is not possible to assert with all confidence that vineyard and orchard prices were in counter-trend to the price fluctuation of the other real properties.

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7. Corrigenda: "The Economy of Emar I"

The correct purchase price of the field sold in Hirayama 15/AuOr 5 6 is 240 shekels which is the highest attested in field sale contracts (p. 260). Therefore, the average of purchase prices is 63,26 shekels (p. 260).

Area and price per square $ik\hat{u}$ of the fields sold in E 2 were mistakenly counted; the measurements of field b are not fully preserved, but it is assumed that the length measures 1 $ik\hat{u}$ and the width is 1 $\check{s}iddu$. As a consequence the following changes must be applied:

- p. 260. The average price per square $ik\hat{u}$ is 30,078 shekels.
- p. 260. The percentage of contracts recording prices per square ikû below 60 sh. is 82%.
- p. 261. There are six sale contracts recording prices per square $ik\hat{u}$ above 60 shekels; the average of prices per square $ik\hat{u}$ below 60 shekels is 14,91 shekels.

- p. 261. Figure 1: percentages of prices per square $ik\hat{u}$ between 41-60 and 61-99 shekels are 9% and 3% respectively.
- p. 262. The average price per square *ikû* of fields located in Rabban is 44,16 *sh*.
- p. 264. Table 1: price per square *ikû* of E 2 is 62,07 shekels.
- p. 265. The price per square *ikû* of E 2 is 62,07 shekels.
- p. 266. The average price per square $ik\hat{u}$ in Ninurta's sales is 42,05 shekels.
- p. 267. The prices per square $ik\hat{u}$ in Ninurta's sales under 40 shekels coincide with those under 60 shekels and the average is 11,36 shekels.
- p. 273. Table 2: price per square $ik\hat{u}$ of E 2 is 62,07 shekels.
- p. 274. Pilsu-Dagan $Z\bar{u}$ -Aštarti = 35,79 sh. per square $ik\hat{u}$.
- p. 260. In E 115 Ḥuza and Baʿal-bēlu sons of Bēlu-kabar sell a *tugguru* building, 5 fields and an unspecified number of fields to a member of the Milki-Dagan's family, Aḥī-Dagan son of Dagan-kabar son of Milki-Dagan for 20 *sh*. The text does not contain the list of adjoining properties.
- p. 260. The Syro-Hittite text E 82 listed in Table 4 (p. 279) is to be added to multiple sales contracts; the purchase price, 10 shekels, refers to a *tugguru*-building and a sown field.⁸⁹
- p. 260. The following contracts that do not provide clear indications of purchase prices should be taken into account for calculating the average surface area.

Text	Script	Location	Measurements	Surface	Price	Buyer	Seller
E 149a	S	Wadi of []	L: ½ <i>ikû</i>	0,236	?	PN	NIN
			W: 2 šiddu 6				
			GÌR				
E 149b	S	Wadi of []	L: 4,5 <i>ikû</i>	2,875	?	PN	NIN
			W: 3 šiddu 5				
			GÌR				
E 3b	S	Rabban	L: 1 <i>ikû</i>	1	150	PN	NIN
			W: 1 <i>ikû</i>		(1 field – 1		
					vineyard)		
Iraq 54 4	S	Irrigation	6 square <i>ikû</i>	6	?	PN	NIN
		district of	_				
		Izbu					

These texts are to be added to Table 3 (pp. 278-279). Including these contracts as well as the aforementioned E 2 the average surface area is 4,46 square $ik\hat{u}$. The contracts TBR 16 and TBR 17 are not used here because the relationship between $ik\hat{u}$ and ammatu (cubit), which is adopted for field sizes in these two documents, is unclear. 90

pp. 261-265. The Ninurta's sales with unpreserved prices E 3b, Iraq 54 4 and RE 52 may be added to the contracts concerning fields located in Rabban (E 3b, RE 52) and in the irrigation districts (Iraq 54 4, 2, *i-na* KÁ *iz-bi*, "in the irrigation district of Izbu"). 91

^{89.} See Mori 2003, 131.

^{90.} See ibid., 104-105, Chambon 2008, 157-151.

^{91.} For this town see Reculeau 2008, 134 and n. 50.

- p. 263. Interpretation of KA as "irrigation district" and Yardānu as the major course of a wadi system is to be definitely accepted.
- p. 265. There are four identified *siphu* fields (ASJ 14, E 2b, E 142 and ZA 90 6b); prices per square *ikû* are respectively: 24, 19, 62,07, 50 and 127,86 shekels. E 3b should be added to the list of sales of *merištu* fields but the price per square *ikû* cannot be calculated.
- p. 266. Two documents, E 82 and E 115, record purchases of fields by members of the families of Ḥima and Milki-Dagan who took advantage of sellers' indebtedness⁹²: in E 82 a widow, Baʿal-na[...], sold a *tugguru*-building and a sown field to Dagan-taliḥ son of Ḥima for only 10 shekels; in E 115 the buyer is Aḥī-Dagan son of Dagan-kabar son of Milki-Dagan.
- p. 266. The number of fields sold by Ninurta is 38.
- p. 267. The smallest field sold by Ninurta is E 149a (0,236 square ikû).
- p. 267. Fn. 34: E 115 may be added to the sales between private citizens whose price per square *ikû* cannot be calculated.
- p. 267. Fn. 35: E 2b = 0,167 square $ik\hat{u}$; E 3b = 1 square $ik\hat{u}$.
- p. 268 f) Iraq 54 4 does not include the year of distress formula that is instead written in E 149. Pilsu-Dagan appears as seller in E 137 and not in E 138. The highest price per square $ik\hat{u}$ of sales carried out in years of distress is 42 shekels (TBR 58) as indicated in Table 3 (p. 278). The purchase price in Hirayama 15 is 240 shekels.
- p. 269. The buyer in E 137 and E 138 is Issur-Dagan as correctly indicated in Table 4 (p. 279).
- p. 270. Considerations in fn. 42 should probably be dismissed: it is likely that Elli was the crown prince at that time.
- p. 275. The picture outlined for the Syro-Hittite sales of fields requires to be redefined. Fields sold in Syro-Hittite contracts record lower values in comparison with Syrian sales. Indeed the average price per square ikû in the Syro-Hittite sales is 5,33 sh. against 32,55 sh. in the Syrian sales and an overall average of 30,078 sh. Nevertheless, this figure is based on a very limited number of sources as only five Syro-Hittite sales of fields are preserved and only in three documents prices per square $ik\hat{u}$ can be calculated (Hirayama 13, TBR 38 and TBR 68). Moreover some of these sales were altered by factors unrelated to the value of fields on the market. The evaluation of the field sold in Hirayama 13 was surely higher than the price per square $ik\hat{u}$ that can be calculated because the purchase price includes a not clearly identified item. 93 The price in TBR 68 was likely influenced by the state of need of the seller because the contract contains the redemption clause that usually reveals economic difficulties. 94 Two other Syro-Hittite sales, the aforementioned E 82 and E 115, were also carried out under the pressure of debts; although the prices per square $ik\hat{u}$ cannot be calculated, the fields were clearly evaluated at a low level (see above). Only in TBR 38, which records a low price per square ikû (5 sh.), the transaction was not affected by economic hardship. Nevertheless, it should be reminded that similar low prices are recorded in some Syrian sales as well. A more reliable evaluation of field prices at Emar under the Hittite rule is perhaps supplied by the text MFA 1977.114, a lawsuit over a loan of 45 shekels that was repaid with a field of 2 square $ik\hat{u}$. Therefore, albeit there is evidence that the level of field prices in the Syro-Hittite records was lower than in the Syrian-type contracts, such decrease should not be overestimated. By way of inclusion of MFA 1977.114 the average price per square $ik\hat{u}$ rises to 9,62 shekels.

^{92.} See Viano 2012, 134.

^{93.} See Fijałkowska 2014, 404 n. 291.

^{94.} Cf. Viano 2012, 126-127.

- p. 278. Table 3: on the basis of the measurements provided by TBR 11b, the price per square *ikû* in TBR 2, which concerns the same field, can be calculated at 100 *sh*., cf. Table 1 p. 264.
- p. 277. The text E 2 is missing in Table 3; sizes of the second field are restored on the basis of E 6 which refers to the same transaction.

Text	Script	Location	Measurements	Surface	Price	Price per sq. ikû	Buyer	Seller
E 2 a + b	S	Rabban	a) L: 1,5 ikû W: 1,5 ikû b) L: [1] ikû W: [1?] šiddu	2,42	150	62,07	PN	NIN

- p. 279. BLMJ 5, which records the sale of five fields, may be added to Table 4 but measurements and adjoining properties are not provided by the text. These fields are sold together with a *tugguru*-building for 30 shekels by Itūr-Dagan to Puašata son of Šadī-Dagan. The contract is a Syrian tablet dated to Pilsu-Dagan.
- p. 279. Table 4: the buyer in E 146 is Mašru-Ḥamis who is to be identified with the buyer in the house sale contract Hirayama 7.95

Data from field sale contracts can be summarized as follows:

Average surface area		4,46
Average purchase price		63,26
Average price per sq. ikû	Overall	30,078
	Prices per square <i>ikû</i> below 60 shekels (82%)	14,91
	First dynasty	22,17
	First generation second dynasty	
	Pilsu-Dagan – Zū-Aštarti	
	Elli	31,83
	Syro-Hittite sales	5,33 / 9,62
	Syrian sales 3	
	Ninurta's sales	42,05

- 8. Corrigenda: "The Economy of Emar II"
 - 1) House sales
- p. 110. The total number of transactions is 71.
- p. 116. Table 2: the purchase price in E 20 is written 1 *me-at* 70 MA.NA that is emended by Arnaud in 1 *me-at* 70 GÍN (170 shekels). However according to Durand⁹⁶ 70 could be read ½ or ⅓; in this case the purchase price would be 120-130 shekels.
- p. 117. Table 2: the writing of the price in E 158, 70 MA.NA (=4200 shekels), is considered as a scribal mistake for 70 GÍN.
 - 95. See Cohen 2009, 122.
 - 96. Durand 1990, 177.

- p. 117. Table 2: corrected measurements in Hirayama 9 are 16 x 8 cubits; hence the surface area is 128 square cubits and the price per square cubit is 0,203 shekels. This, however, does not affect the average price per square cubit that is 0,367 shekels (p. 118).
- p.117. Table 2: the purchase price in TBR 8 is not fully preserved, [x] *me-at* KÙ.BABBAR-*pu*, but it is tentatively reckoned as 100 shekels.
- p. 117. Table 2: length in TBR 10, (1)2 cubits, is based on the diagram in Mori (2003), 80; by looking at Arnaud's hand-copy this restoration seems plausible.
- p. 117. Some texts that do not preserve purchase prices provide measurements:

Text	Script	Measurements	Surface	Price	Buyer	Seller
BLMJ 5	S	L: 24	288	70	RF	RF
		W: 12		(1 house – 1 vineyard)		
BLMJ 7	S	L:24	384	200	RF	PN
		W: 16		(1 house; 1 <i>tugguru</i> building; 1 KI.KÁ;		
				fields)		
E 97	S	L: 21	336		PN	PN
		W: 16				
E 157	S	L: 14	147		PN	PN
		W: 10,5				
E 161	S	L: 22	308		PN	PN
		W: 14				
Hirayama 10	S	L: 22	264		PN	PN
-		W: 12				
TBR 54	S	L: 16	304		PN	PN
		W: 9				
TBR 61	S	L: 26	468		PN	PN
		W: 18				

By counting data from these contracts the average surface area is 316,25 square cubits.

- p. 118. The average purchase price is 128,059 shekels.
- p. 121 fn. 27. The seller is Ipgi-Dagan son of Ba'al-malik.
- p. 124. The documents RE 29 and SMEA 30 4, which do not preserve the purchase prices, are to be added to the number of Ninurta's sales that, therefore, include 13 contracts for 17 transactions. The average purchase price in Ninurta's sales is 237,14 *sh*.
- p. 124-125. The hypothesis of auction as a system of sales by Ninurta is to be perhaps abandoned because foreclosures usually record low prices.
- p. 129-130. Table 10: the price per square cubit in Hirayama 9 is 0,203 sh. and the average price per square cubit is 0,191 sh.
- p. 130-131. Table 12: the price per square cubit in Hirayama 9 is 0,203 sh. and the average price per square cubit is 0,344 sh.

p. 129-131. The distribution of houses across the road types they flanked in Tables 10, 11 and 12, is only based on house front sides; hence roads that flank houses on their other sides are not included in the tables. Taking into considerations all the sides, the prices per square cubits are as follows⁹⁷:

Road type	Price per square cubit
KASKAL	0,277
SILA.DAGAL.LA	0,333
huhinnu	0,475

- p. 138. Table 16: the average purchase price in the Syro-Hittite sale contracts is 58,151 shekels.
 - 2) KI ersetu sales
- p. 148. Some texts that do not preserve the purchase prices provide measurements:

Text	Script	Measurements	Surface	Buyer	Seller
BLMJ 10	S	L: 26	390	?	NIN
		W: 15			
E 96	S	L: 21	273	?	?
		W1: 11			
		W2: 15			
E 152	S	L: 18	360	NP	NIN
		W: 20			
RE 43	S	L: 10	250	?	?
		W1: 30			
		W2: 20			
RE 86a	S	L: 22	264	PN	PN
		W: 12			
SMEA 30 5	SH	L: 40	720	?	King of
		W: 18			Karkemiš

The largest KI erṣetu plot is the one sold in SMEA 30 5 (720 square cubits); including these texts the average surface area is 311,82 square cubits.

p. 151-153. The distribution of ^{KI}erṣetu-plots across the road types they flanked in Tables 25, 26 and 27, is only based on front sides of ^{KI}erṣetu-plots; hence roads that flank ^{KI}erṣetu-plots on their other sides are not included in the tables. Taking into considerations all the sides, the prices per square cubit are as follows⁹⁸:

Road type	Price per square cubit		
KASKAL	0,052		
<i>huhinnu</i>	0,252		
SILA.DAGAL.LA	0,338		

^{97.} Because several houses flank different road types on their sides, their price per square cubit are counted for each road type in the table.

^{98.} As with houses, prices per square cubit of KIersetu-plots are counted for each road type in the table.

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- p. 153-154. Location of E 171 is likely to be identified with the irrigation district of "flooding". 99
- p. 158. Table 30: the average price per square cubit under Pilsu-Dagan is 0,213 shekels.
- p. 162. Table 33 is to be corrected as follows:

Real estate	Transactions ¹⁰⁰	Average purchase price	Average price per sq. cubit	Average surface area
Houses	71	128,059	0,367	316,25
^{KI} erșetū	44	70,603	0,231	311,819
tuggurū	11	289,833	0,676	418

^{99.} Reculeau 2008, 135 n. 67.

¹⁰⁰. The table reports the total number of transactions recorded in sale contracts.