

A CATALOGUE OF HARBOURS IN THE PROVINCE OF ĜIRSU/LAGAŠ DOCUMENTED IN THE ADMINISTRATIVE TEXTS OF THE UR III PERIOD

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As is well known, boat trips on rivers and canals were an essential part of Mesopotamian economy at the end of the 3rd millennium BC; the Tigris and Euphrates, with their tributaries and canals, served as major highways in Mesopotamia. In the Ur III period, inland traffic by waterway was very extensive (more so than interregional water transport). This paper aims at highlighting ports/harbours of the province of Ĝirsu/Lagaš recorded in the administrative texts from the end of the 3rd millennium, by cataloguing the name of the places where these harbours are located.

Key words: Ur III, harbours, Ĝirsu, Lagaš, ships, boats.

1. Introduction¹

The province of Ĝirsu/Lagaš, along with the capitals Uruk and Ur, was located in the farthest south portion of Mesopotamia. It consisted of the three districts of Ĝirsu, Kinunir-NIĜIN and Gu'abba. It extended 80 km north to south and 40 km east to west, covering a total area of more than 3000 km² (Yoffee 2005: 57). The Ĝirsu district was the seat of the homonymous city (Ĝirsu/Tello), from where almost all of the known cuneiform texts originate, plus other smaller centres such as Kisura, Kalamsaga and Kimadasala. It was located to the north, on the borders of the province of Umma,

¹ This study was written as part of the research funded by the Czech Science Foundation as the project GA ČR 18-01897S 'Economic Complexity in the Ancient Near East. Management of Resources and Taxation in the 3rd and 2nd Millennium BC.' Abbreviations used in the paper are found on the website of the Cuneiform Digital Library Initiative (URL consulted on 1st February 2019, http://cdli.ox.ac.uk/wiki/abbreviations_for_assyriology); add AS (Amar-Sin), IS (Ibbi-Sin), ŠS (Šu-Sin), Š (Šulgi). The texts are transliterated using the following conventions: Obv. = Obverse, Rev. = Reverse. The “/” points out the end of line, whilst “//” an indented line.

whose nearest centre seems to have been Apišal, situated on the Tigris. In the district of Kinunir-NIĜIN, also known as ‘the banks of the canal flowing towards NIĜIN’ (Waetzoldt 1997), lay the major centres of Lagaš (al-Hiba), Kinunir, NIĜIN (Zurghul), as well as Kiesa and Urub. The southernmost district was Gu’abba (‘the sea shore’), where we find the towns of Gu’abba, ‘Old’ Gu’abba,² Asuna, Hurim, Gukara. The province of Ĝirsu/Lagaš was crossed by the Tigris which represented its border to the east. From the town of Ĝirsu up to the sea, the province was crossed by a ‘canal flowing towards NIĜIN’ (Carroué 1986).

At the end of the 3rd millennium, the transportation of people and goods via watercourses is attested in thousands of documents and evidenced in all Ur III provinces. This paper focuses on the province of Ĝirsu/Lagaš and it is aimed at cataloguing all the harbours³ of the province recorded in the documentation. More precisely, the chronological limits are those of the Ur III Dynasty.

As already observed by Lafont (2010: 174–178), boats from the province of Ĝirsu/Lagaš reached centres both within the province and outside. Although Ĝirsu ship and boat texts are rich enough in terms of quantity, they often fail to contain the basic information needed for the reconstruction of routes, such as travel days or the waterways used.⁴ Despite these difficulties, as it is well known, the documentation reveals that connections by watercourse involving the province of Ĝirsu/Lagaš were very substantial. Not only can this be shown by reference to the quantity of texts, but also, in particular, by a number of texts that explicitly inform us that goods were loaded onto boats in many areas of this province. As will be shown in the following pages, although the documentation rarely references to harbours (‘kar’),⁵ several zones of Ĝirsu/Lagaš province had harbours where ships were loaded and/or unloaded.⁶ Such harbours were not only recorded to be in the main centres, but also in granaries, fields, villages, temples and mills.

² ‘Old’ Gu’abba was probably located on the former coastline which had receded over the years due to the accumulation of river sediments (De Maaijer 1998: 63).

³ In English, there are several words that define a place where boats can be loaded or unloaded: dock, harbour, port, quay or wharf, but we do not know how these structures appeared physically in Ur III times. Therefore, it is impossible to use the correct word to define them. In order to simplify things, this paper will use the word ‘harbour’ which, according to the Webster’s dictionary, is ‘a part of a body of water protected and deep enough to furnish anchorage’ and seems to be a more general definition.

⁴ This lack of information is even more evident if we compare it with the documentation coming from the province of Umma. For a reconstruction of the hydrology of the Umma province, see Steinkeller 2001.

⁵ See, for example, MVN 5 185 (ŠS 3/xi/25). To the best of my knowledge, there is no specific study on the Sumerian ‘kar’, although it is clear that the general meaning is a place which furnish anchorage: for example, Steinkeller (2001: 36, fn. 51) translate ‘quay’; the electronic *Pennsylvania Sumerian Dictionary* translates ‘harbor, quay’ (<http://psd.museum.upenn.edu/nepspd-frame.html>, URL consulted on January 10th, 2019). The Akkadian word for ‘kar’ is ‘kāru’ and, in the 2nd and 1st millennia, it could also have different meanings. For an overview of the meanings of ‘kāru’, see the *Chicago Assyrian Dictionary*, K, pp. 231–239.

⁶ The unloading operation in Ĝirsu/Lagaš province (‘ba-al-la’) are, oddly enough, recorded just twice in the documentation: Farmer’s Instruction 7.06 (AS 1/-/-) and ITT 5 8239 (-/-/-).

2. Harbours in Ġirsu/Lagaš Province

In the Ġirsu/Lagaš province, several documents record the fact that boats were loaded in various places in the province, with goods being of different typologies. The basic idea of this paper is that we can reconstruct the network of harbours by collecting all those texts that mention boats carrying goods. These texts, apart from the quantity of the goods loaded, may also refer to the location where loading operations took place. From this, one can possibly assume that these sites also featured as harbours used for loading and unloading goods. However, the texts describing the movement of goods on boats do not often contain information on the places of departure or arrival, limiting themselves to recording the amount of goods⁷ and the names of the responsible officials.⁸ Some texts, on the other hand, contain only the starting place and the names of the officials who gave and received the goods,⁹ while others only record the place of arrival.¹⁰ Moreover, some texts record just a list of boats with their respective loading capacity and the place where these boats are stationed.¹¹ Nevertheless, all these texts allow us to provide a list with the name of the places where harbours were located. It is worth stressing that if one looks at the texts more closely, it is not that simple to decide whether a given geographical name is identical with the place where the goods mentioned in the text were in fact loaded. Consider, for example, MVN 6 190 (Š 40/-/-):

Obv. 1-5: 180.0.0 še gur lugal / še a-ša₃ Na-ba-sa₆ / ki^dUtu-mu-ta / ġiri₃ Lu₂-^dNa-du₃-a / dumu KA.KA

Rev. 1-5: mu Lu₂-^dNa-du₃-a-še₃ / kišeb Ur-^dAl-la ma₂-laḥ₅ / *blank line* / ma₂-a si-ga / mu us₂-sa e₂ Puzur₄^{is}-^dDa-gan ba-du₃

Seal: Ur-^dAl-la / dumu Ur-zikum-ma / ma₂-laḥ₅ / ^dNin-ġiš-zi-da

Obv. 1-5: 180 (*gur*) of barley (measured in) royal *gur* / barley of the field of Nabasa / from Utu-mu / *via* Lu-Nadua / son of KA.KA

Rev. 1-5: on behalf of Lu-Nadua / seal of Ur-Alla the sailor / *blank line* / loaded onto a boat / Year after the year: the temple of Puzriš-Dagan was built

Seal: Ur-Alla / son of Ur-zikum / the sailor / of Ningišzida

In this case, we cannot assume that the barley was loaded in the ‘field of Nabasa’ because we have no information where this barley was actually loaded. This is an administrative document which records the origin of the barley and its way of transport, but it is not meant to record its itinerary.

⁷ In some texts, only the goods are recorded, without the indication of the quantity. See, for example, ITT 3 6128 (Š 28/xi/-), where 31 workers for 13 days towed a boat loaded with leather for the *bala* (obv. 1-2: 31 guruš u₄ 13-še₃ / ma₂ kuš bala-še₃ gid₂-da). On *bala*, see later.

⁸ See, for example, MVN 7 303 (Š 40/-/-).

⁹ See, for example, MVN 7 148 (Š 40/i/-).

¹⁰ See, for example, ITT 3 6128 (Š 28/xi/-).

¹¹ See, for example, BPOA 6 37 (unknown date).

On the other hand, there are texts that clearly state where the goods are actually loaded. There are two expressions that indicate that something is loaded onto a boat: ‘ma₂-a si-ga’, ‘loaded onto a boat’, and ‘ma₂-a ġar-ra’, ‘placed onto a boat’. An example of the expression ‘ma₂-a si-ga’ is provided in the text SAT 1 303 (Š 46/iv/-):

Obv. 1-5: 310.0.0 še gur lugal / i₃-dub₅ E₂-gibil₄-le-ta / **ma₂-a si-ga** / kišeb Ur-ur dumu A-tu / iti šu-numun

Rev. 1-3: ġiri₃ Ba-zi / ugula Iš₃-am₃ / mu us₂-sa Ur-bi₂-lum^{ki} // ba-hul

Seal: Ur-ur / dub-sar / dumu A-tu

Obv. 1-5: 310 (*gur*) of barley (measured in) royal *gur* / from the granary of E-gibile (field) / loaded onto a boat / seal of Ur-ur son of A-tu / month 4

Rev. 1-3: *via* Bazi / the supervisor is Iš₃-am₃ / Year after the year: Urbilum was destroyed

Seal: Ur-ur / scribe / son of Atu

The text clearly records that over ninety tons of barley were loaded from E-gibile field. It is thus clear that this field had a place to load goods onto boats.

An example of the expression ‘ma₂-a ġar-ra’ is provided by the text DAS 34 (AS 8/iv/-)

Tablet

Obv. 1-4: 33 guruš / u₄ 21-še₃ / ġeš **ma₂-a ġar-ra** // u₃ ma₂ gid₂-da / E₂-gibil₄-le-ta

Rev. 1-4: Ġir₂-su^{ki}-še₃ / dumu dab₅-ba-me // ġiri₃ Lu₂-gu₃-de₂-a / iti šu-numun / mu en Eridu^{ki} ba-a-hun

Envelope

Obv. 1-5: 33 guruš / u₄ 17-še₃ / dumu dab₅-ba-me / ġeš **ma₂-a ġar-ra** // u₃ ma₂ gid₂-da // E₂-gibil₄-le-ta

Rev. 1-5: Ġir₂-su^{ki}-še₃ / kišeb Lu₂-gu₃-de₂-a / *blank space* / iti šu-numun / mu En Eridu^{ki} ba-a-hun

Seal: Lu₂-gu₃-de₂-a / dub-sar / dumu Ur-[...]

Tablet

Obv. 1-4: 33 workers / for 21 days / placed wood onto a boat // and (they) towed the boat / from E-gibile

Rev. 1-4: to Ġirsu / (they) are dumu dab₅-ba (workers) // *via* Lugudea / month 4 / Year: En of Eridu was installed

Envelope

Obv. 1-4: 33 workers / for 17 days / (they) are dumu dab₅-ba (workers) / (they) placed wood onto a boat // and (they) towed the boat // from the E-gibile

Rev. 1-5: to Ĝirsu / seal of Lugudea / *blank space* / month 4 / Year: En of Eridu was installed

Seal: Lugudea / scribe / son of Ur-[...]

In the latter case, 33 workers for 21 days (17 recorded on the envelope) placed wood onto a ship and towed it from E-gibile field to Ĝirsu.

As the texts are not always clear regarding the place where goods were actually loaded, we must exercise cautions and distinguish among texts which record places where boats were loaded and others where we cannot prove this. More specifically, we can be sure that geographical name(s) mentioned in a text had a place we can define as ‘harbour’ in the following cases:

- texts which record that boats have been loaded in or from a specific place;¹²
- texts which record boats belonging to a specific place;¹³
- texts which record a number of workers for a number of days loading and/or towing a boat from a place to another.¹⁴

Keeping this in mind, the list below shows all places in the province of Ĝirsu/Lagaš that had a harbour, divided into settlement types and recorded in alphabetical order.

Inhabited centres:

Harbour	Attestation	Good(s) ¹⁵	Departure place	Arrival place
Ĝir ₂ -su ^{ki} 16	CT 5 39 BM 17753 (AS 2/-/-)	288 baskets and 8 tons of wool	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}
	MVN 12 366 (AS 2/ix/-)	58.69 tons of sig ₁₅ flour and 492.3 tons of flour	Ĝir ₂ -su ^{ki}	Nibru ^{ki}
	ITT 3 5102 (AS 7/vi/-)		gišnimbar du ₃ -a	Ĝir ₂ -su ^{ki}
	DAS 34 (AS 8/iv/-)	wood	E ₂ -gibil ₄ -le	Ĝir ₂ -su ^{ki}
	ITT 3 5084 (AS 9/v/-)	flour	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}

¹² See, for example, ITT 4 7088 (Š 40/iii/-), cited above, or also MVN 12 288 (Š 48/iv/-).

¹³ See, for example, BPOA 6 37 (unknown date).

¹⁴ See, for example, ITT 3 5102 (AS 7/vi/-). Sometimes, the place of arrival can be omitted: see, for example, MVN 5 172 (ŠŠ 1/xi/-).

¹⁵ The quantity of goods is converted into modern units of measurement. To simplify the conversion, the following equivalences are used: 1 *gur* = 300 litres (ca. 300 kilograms), 1 ma-na = 500 grams.

¹⁶ We have to highlight, however, that the name ‘Ĝirsu’ and the name ‘Lagaš’ can refer, in the Ur III texts, not only to the district or to the city but, in general, also to the province (Sallaberger and Westenholz 1999: 286). Therefore, in this case the texts might simply refer to the province, without specifying the district.

	ITT 3 5176 (AS 9/v/-)	flour	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}
	Fs. Owen 176 L. 4976 (AS 9/xi/-)	semolina	Ĝir ₂ -su ^{ki}	Nibru ^{ki}
	UTI 4 2741 (ŠS 1/-/-)		Umma ^{ki}	Ĝir ₂ -su ^{ki}
	BPOA 6 37 (unknown date)			
	ITT 5 8239 ¹⁷ (unknown date)	barley	Ĝir ₂ -su ^{ki}	Ĝir ₂ -su ^{ki}
Gu ₂ -ab-ba ^{ki}	ASJ 3 183 196 (Š 46/-/-)	8.839 tons of semolina, 104.999 tons of flour and 1.02 tons of sig ₁₅ flour	Gu ₂ -ab-ba ^{ki}	
	CT 5 39 BM 17753 (AS 2/-/-)	288 baskets and 8 tons of wool	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}
	TÉL 8 (AS 7/-/-)	flour	Gu ₂ -ab-ba ^{ki}	Nibru ^{ki}
	ITT 3 5084 (AS 9/v/-)	flour	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}
	ITT 3 5176 (AS 9/v/-)	flour	Gu ₂ -ab-ba ^{ki}	Ĝir ₂ -su ^{ki}
	BPOA 6 37 (unknown date)			
Ki-es ₃ -sa ₂ ^{ki}	BPOA 6 37 (unknown date)			
Ki-ma-da-sal ₄ -la ^{ki}	ITT 4 7072 (Š 30/x/-)	30 litres of barley		Ki-ma-da-sal ₄ -la ^{ki}
Ki-nu-nir ^{ki}	BPOA 6 37 (unknown date)			
NIGIN ^{ki}	BPOA 6 37 (unknown date)			

Agricultural fields:¹⁸

Harbour	Attestation	Good(s)	Departure place	Arrival place
a-ša ₃ a-ba-al-la*	ITT 4 7088 (Š 40/iii/-)	59.76 tons of barley	a-ša ₃ a-ba-al-la	

¹⁷ This text records a round trip from Ĝirsu to Nippur: upstream (on the Tigris to Kasahar), turning at Kasahar, (then downstream) to Nippur, unloading the boat (in Nippur), upstream (to Kasahar, downstream on the Tigris) to Ĝirsu (Steinkeller 2001: 81).

¹⁸ In the following lists, if the texts record that the goods were taken from the granary attached to a field or a village, the name of the field or village is marked with an asterisk ‘*’.

	MVN 7 197 (Š 40/iii/-)	127.08 tons of barley	(i ₃ -dub ₅) a-ša ₃ a-ba-al-la	
	Farmer's Instructions 7.06 (AS 1/-/-)	3540 tons of barley	a-ša ₃ a-ba-al-la	a -ša ₃ ha-zi
a-ša ₃ a-KA-sahar	MVN 6 483 (Š 40/vi/-)	72.36 tons of barley	a-ša ₃ a-KA-sahar	Uri ₅ ^{ki}
a-ša ₃ a-sag-du ₃ -du	MVN 12 288 (Š 48/iv/-)	168.36 tons of barley	(i ₃ -dub) a-ša ₃ a- sag-du ₃ -du	
a-ša ₃ ambar ^{ki} *	WMAH 9 (Š 47/v/-)	51 tons of barley	(i ₃ -dub) Ambar ^{ki}	
a-ša ₃ Ambar- Lagaš ^{ki}	MVN 5 172 (ŠŠ 1/xi/-)	390 litres of barley	(a-ša ₃) Ambar- Lagaš ^{ki}	
a-ša ₃ ^{giš} ba-gibil- la*	SAT 1 287 (AS 2/-/-)	306.6 tons of barley	i ₃ -dub a-ša ₃ ^{giš} ba- gibil-la	
a-ša ₃ bar-ra-AN*	TCTI 2 2692 (ŠŠ 3/-/-)	9.645 ⁷ tons of barley	(i ₃ -dub) a-ša ₃ bar- ra-AN	
a-ša ₃ BAR.AN*	MVN 12 63 (Š 46/ix/-)	87.9 tons of barley	(i ₃ -dub) a- ša ₃ BAR.AN	Nibru ^{ki}
a-ša ₃ da-ze ₂ *	MVN 12 215 (Š 47/iii/-)	35.175 tons of barley	(i ₃ -dub) a-ša ₃ da- ze ₂	
a-ša ₃ du ₆ -imin	MVN 11 114 (Š 47/-/-)	84.06 tons of barley	a-ša ₃ du ₆ -imin	
a-ša ₃ e ₂ -gibil ₄ -le*	HLC 1 47 (pl. 17) (Š 46/iii/-)	90 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ - le	
	CM 26 no. 83 (Š 46/iii/-)	90 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ - le	Nibru ^{ki}
	MVN 12 19 (Š 46/iv/-)	281.4 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ - le	Nibru ^{ki}
	MVN 12 20 (Š 46/iv/-)	149.4 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ - le	Nibru ^{ki}
	SAT 1 303 (Š 46/iv/-)	93 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ -le	
	Nisaba 13 41 (Š 46/iv/-)	270 tons of barley	(i ₃ -dub) e ₂ -gibil ₄ - le	
	DAS 34 (AS 8/iv/-)	wood	e ₂ -gibil ₄ -le	Ġir ₂ -su ^{ki}
	Fs. Owen 177 L. 5182 (AS 9/x/-)	barley	e ₂ -gibil ₄ -le	Nibru ^{ki}
a-ša ₃ gan ₂ -zi*	TCTI 2 2545 (ŠŠ 5/viii/-)	169.72 tons of barley	(i ₃ -[du]b) gan ₂ -zi	
a-ša ₃ gi-dah-ha*	MVN 12 62 (Š 46/ix/-)	225.6 tons of barley	(i ₃ -dub) a-ša ₃ gi- dah-ha	
	MVN 12 68 (Š 46/ix/-)	219 tons of barley	(i ₃ -dub) a-ša ₃ gi- dah-ha	
	ITT 3 6294 (IS 1/vi/-)	barley	a-ša ₃ gi-dah-ha	

	LB 2366 (-/ix/-)	[...] ¹⁹ barley	(i ₃ -dub) a-ša ₃ gi-dah-ha	
a-ša ₃ ha-zi	Farmer's Instructions 7.06 (AS 1/-/-)	3540 tons of barley	a-ša ₃ a-ba-al-la	a-ša ₃ ha-zi
a-ša ₃ in-im-bi-a-ba*	Nisaba 17 55 (Š 45/xi/-)	171 tons of barley	(i ₃ -dub) a-ša ₃ in-im-bi-a-ba	Nibru ^{ki}
a-ša ₃ LAGAB×GU4-a	Nisaba 17 117 (Š 36/xii/-)	270.5 litres of barley	a-ša ₃ LAGAB×GU4-a	
a-ša ₃ Sag-ub ₅ ^{ki}	MVN 7 114 (Š 40/vi/-)	108 tons of barley	a-ša ₃ Sag-ub ₅ ^{ki}	Uri ₅ ^{ki}
a-ša ₃ ^d Šul-gi-zi-kalam-ma	MVN 12 398 (AS 4/i/-)	30.18 tons of barley	a-ša ₃ ^d Šul-gi-zi-kalam-ma	
a-ša ₃ SU ₇ -MI*	CM 26 no. 92 (ŠS 3/-/-)	barley	(i ₃ -dub) a-ša ₃ SU ₇ -MI	Nibru ^{ki}

Granaries:²⁰

Harbour	Attestation	Good(s)	Departure place	Arrival place
i ₃ -dub e ₂ -gibil ₄ -le-tur	CM 26 no. 85 (Š 46/xii/-)	200.7 tons of barley	i ₃ -dub e ₂ -gibil ₄ -le-tur	Nibru ^{ki}
i ₃ -dub gu ₂ i ₇ -niĝin ₉	SAT 1 109 (AS 1/vii/-)	85.98 tons of hulled grain and 900 litres of barley	i ₃ -dub gu ₂ i ₇ -niĝin ₉	
i ₃ -dub KU-ki-ku-niĝ ₂ -du ₁₀ ²¹	HLC 1 271 (pl. 14) (Š 45/iii/-)	97.2 tons of barley	i ₃ -dub KU-ki-ku-niĝ ₂ -du ₁₀	
i ₃ -dub KU-ki-niĝ ₂ -du ₁₀	ASJ 3 166 145 (Š 45/-/-)	144 tons of barley	i ₃ -dub KU-ki-niĝ ₂ -du ₁₀	Nibru ^{ki}
	CM 26 no. 82 (Š 45/-/-)	90 tons of barley	i ₃ -dub KU-ki-niĝ ₂ -du ₁₀	Nibru ^{ki}
i ₃ -dub igi-gal ₂	OrSP 5 49 10 Wengler 5 (Š 46/i/-)	112.92 tons of barley	i ₃ -dub igi-gal ₂	Nibru ^{ki}
	Nisaba 17 46 (Š 46/xii/-)	6.9 tons of barley	i ₃ -dub igi-gal ₂	Nibru ^{ki}
	MVN 12 194 (Š 47/i/-)	323.46 tons of barley	i ₃ -dub igi-gal ₂	Nibru ^{ki}

¹⁹ The quantity is broken.

²⁰ This list records the granaries the names of which are not attributable to field names.

²¹ This warehouse is attested just in this text. There might be a mistake in writing its name: KU-ki-ku-niĝ₂-du₁₀ instead of KU-ki-niĝ₂-du₁₀ (see the following row).

	MVN 12 195 (Š 47/i/-)	271.38 tons of barley	i ₃ -dub igi-gal ₂	Nibru ^{ki}
i ₃ -dub pa ₅ -enku	Nisaba 13 46 (Š 46/ix/-)	93 tons of barley	i ₃ -dub pa ₅ -enku	Nibru ^{ki}

Villages:

Harbour	Attestation	Good(s)	Departure place	Arrival place
e ₂ -duru ₅ Ka ₅ ^{a*}	MVN 12 16 (Š 46/ii/-)	58.8 tons of barley	e ₂ -duru ₅ Ka ₅ ^{a*}	Nibru ^{ki}

Temples:

Harbour	Attestation	Good(s)	Departure place	Arrival place
e ₂ ^d En-ki	ITT 3 5113 (ŠS 4/xi/-)	barley	e ₂ ^d En-ki	

Other administrative structures:

Harbour	Attestation	Good(s)	Departure place	Arrival place
e ₂ -kikken	Nisaba 18 91 (AS 8/iii/-)	flour	e ₂ -kikken	

Other places:

Harbour	Attestation	Good(s)	Departure place	Arrival place
Ba-ba-az ^{ki}	RA 62 12 18 (ŠS 1/-/-)		Ba-ba-az ^{ki}	e ₂ -gal TUM ^{ki}
Bara ₂ -si-ga ^{ki22}	Farmer's Instructions 7.06 (AS 1/-/-)	3600 tons of barley	a-ša ₃ A-ba-al-la	

²² Barasiga, probably identical with Barasiga of Hurim, belonged to the district of Gu'abba (Molina and Steinkeller 2017: 242, fn. 11).

3. Conclusions

As can be seen from the above tables, harbours were located in all three districts of the province in both major²³ and minor²⁴ inhabited centres. Most of the documentation is extremely accurate, precisely recording the name of the field (*a-ša₃*) where the goods were loaded.²⁵ Other harbours can be identified in administrative units such as granaries (*i₃-dub*), villages (*e₂-duru₅*) and temples (*e₂*). Therefore, we are in a position to assume that each administrative unit probably had a place for loading and unloading boats. We have ca. 35 harbours recorded in the administrative documentation of Ġirsu/Lagaš province, with the majority of them placed in agricultural fields. As one could expect, the ships were mainly loaded with barley (or with products derived from barley such as flour). As for the quantity of goods, we should note that the load capacities of ships²⁶ documented in the province are (as the chart below shows) 1.5 tons (5 *gur*), 1.8 tons (6 *gur*), 2.4 tons (8 *gur*), 3 tons (10 *gur*), 6 tons (20 *gur*), 9 tons (30 *gur*), 12 tons (40 *gur*), 15 tons (50 *gur*), 18 tons (60 *gur*), 27 tons (90 *gur*), 36 tons (120 *gur*), 54 tons (180 *gur*) and 108 tons (360 *gur*), but the most common one seems to be boats with a load capacity of 18 tons.

Capacity	Texts
5 <i>gur</i>	Comptabilité 23 ([-/-/-]).
6 <i>gur</i>	ASJ 2 223 (-/-/-).
8 <i>gur</i>	ASJ 2 223 (-/-/-).
10 <i>gur</i>	WMAH 3 (AS 1/-/-); CT 10 50 BM 12248 (AS 7/xi/-); SAT 1 369 (AS 8/ii/-); CM 26 no. 102 (AS 8/iii/14); CM 26 no. 97 (AS 8/xii/19); TCTI 2 3355 (ŠS 3/iv/17); AION 31 176 07 (ŠS 3/-/-);
20 <i>gur</i>	MVN 7 536 (Š 30/v/-); ITT 4 7072 (Š 30/10/-); SAT 1 370 (Š 42/vii/24); Amherst 66 (Š 46/-/-); TLB 3 144 (Š 46/-/-); WMAH 3 (AS 1/-/-); SAT 1 369 (AS 8/ii/-); CM 26 no. 101 (AS 8/iv/25); CM 26 no. 98 (AS/x/25); CM 26 no. 97 (AS 8/xii/19); TCTI 2 3355 (ŠS 3/iv/17); TCTI 2 2720 (ŠS 3/v/1); AION 31 176 07 (ŠS 3/-/-); ITT 5 6728 (ŠS 7/-/-); Comptabilité 23 (-/-/-); LB 2438 (-/-/-); ITT 5 10011 (-/-/-); ASJ 2 223 (-/-/-); DAS 296 (-/-/-).
30 <i>gur</i>	AAICAB 1/1, Ashm. 1924-0693 (Š 46/xi/-); Amherst 66 (Š 46/-/-); TLB 3 144 (Š 46/-/-); WMAH 3 (AS 1/-/-); RA 62 14 23 (AS 2/vii/-); OBTR 98 (AS 7/ix/-); HLC 1 188 (pl. 49) (AS 7/xi/5); MVN 11 97 (AS 7/xii/5); SAT 1 369 (AS 8/ii/-); BPOA 1 369 (AS 8/ii/-); CM 26 no. 102 (AS 8/iii/14); CM 26 no. 101 (AS 8/iv/25); CM 26 100

²³ E.g. Ġirsu or NIĠIN.

²⁴ E.g. Kiesa.

²⁵ It should be noted that texts often contain even more accurate information, indicating not only the name of the field but also, for example, that specific goods had been collected from the granary in the field itself (*i₃-dub*, *a-ša₃ x*, ‘granary in the field *x*’).

²⁶ With regard to the capacity of boats, see Widdel 2009: 159–160.

	(AS 8/iv/-); CM 26 no. 99 (AS 8/x/7); CM 26 no. 98 (AS 8/x/25); TCTI 1 922 (AS 8/xi/29); CM 26 no. 97 (AS 8/xii/19); TCTI 1 1007 (AS 8/-/-); Comptabilité 52 (ŠS 2/vi/15); TÉL 113 (ŠS 2/-/-); WMAH 4 (ŠS 4/x/-); ITT 2 892 (ŠS 9/ii/-); PPAC 5 1664 (IS 2/-/-); PPAC 5 625 (-/vii/20); TCTI 2 2785 (-xii/12); TCTI 2 2772 (-/xii/17/); WMAH 15 (-/8/-); HLC 3 384 (pl. 145) ([-/-/-]); ASJ 18 167 9 ([-/-/-]); RTC 307 ([-/-/-]); BPOA 6 37 (-/-/-).
40 gur	TLB 3 144 (Š 46/-/-); HLC 1 188 (pl. 49) (AS 7/xi/5); MVN 11 97 (AS 7/xii/5); CT 10 50 BM 12248 (AS 7/xi/-); SAT 1 369 (AS 8/ii/-); BPOA 1 169 (AS 8/ii/-); CM 26 no. 102 (AS 8/ii/14); CM 26 100 (AS 8/iv/-); CM 26 no. 99 (AS 8/x/7); CM 26 no. 98 (AS 8/x/25); TCTI 1 922 (AS 8/xi/29); TCTI 1 1007 (AS 8/-/-); BPOA 1 326 (ŠS 5/-/-); PPAC 5 625 (-/vii/20); TCTI 2 2785 (-/xii/12); TCTI 2 2772 (-/xii/17/); HLC 3 384 (pl. 145) ([-/-/-]); Comptabilité 23 (-/-/-); ITT 5 10011 (-/-/-); BPOA 6 37 (-/-/-).
50 gur	HLC 1 188 (AS 7/xi/5); SAT 1 369 (AS 8/ii/-); CM 26 no. 102 (AS 8/iii/14); CM 26 100 (AS 8/iv/-); PPAC 5 625 (-/vii/20); HLC 3 384 (pl. 145) ([-/-/-]).
60 gur	SAT 1 370 (Š 42/vii/24); AAICAB 1/1, Ashm. 1924-0693 (Š 46/xid/-); Amherst 66 (Š 46/-/-); TLB 3 144 (Š 46/-/-); PPAC 5 1285 (Š 47/v/-); WMAH 3 (AS 1/-/-); SAT 1 371 (AS 2/vii/-); RT 18 72-73 017 (AS 4/-/-); SAT 1 374 (AS 5/iv/-); OBTR 98 (AS 7/ix/-); HLC 1 188 (pl. 49) (AS 7/xi/5); TCTI 2 3721 (AS 7/ix/-); CT 10 50 BM 12248 (AS 7/xi/-); ITT 3 5412 (AS 7/xii/-); SAT 1 369 (AS 8/ii/-); Nisaba 18 91 (AS 8/iii/-); CM 26 100 (AS 8/iv/-); TCTI 1 927 (AS 8/v/20); CM 26 no. 95 (AS8/v/21); TCTI 2 2797 (AS 8/v/22); Fs. Owen 172 L. 6459 (AS 8/v/23); Fs. Owen 171 L. 6457 (AS 8/v/26); PPAC 5 723 (AS 8/v/27); TCTI 1 916 (AS 8/v/28); CM 26 no. 96 (AS 8/vi/20); CM 26 no. 99 (AS 8/x/7); CM 26 no. 98 (AS 8/x/25); HLC 1 317 (pl. 2) (AS 8/x/-); TCTI 1 922 (AS 8/xi/29); CM 26 no. 97 (AS 8 xii19); ITT 5 6994 (ŠS 1/iv/-); Comptabilité 52 (ŠS 2/vi/15); TÉL 113 (ŠS 2/-/-); UNT 4 (ŠS 2/-/-); TCTI 2 3355 (ŠS 3/iv/17); TCTI 2 2720 (ŠS 3/v/1); TCTI 2 3329 (ŠS 3/x/-); WMAH 4 (ŠS 4/x/-); ITT 5 6998 (ŠS 7/iii/-); ITT 5 6728 (ŠS 7/-/-); SAT 1 377 (ŠS 7/-/-); ITT 2 892 (ŠS/ii/-); OBTR 110 (-/i/8); PPAC 5 625 (-/vii/20); MVN 6 460 (-/vii/20); TÉL 15 (-/x/29); TCTI 2 2785 (-/xii/12); TCTI 2 2772 (-/xii/17/); ITT 3 6617 (-/-/-); ITT 5 10011 (-/-/-); AuOr 17-18 228 38 (-/-/-); BPOA 6 37 (-/-/-); HLC 3 384 (pl. 145) (-/-/-); DAS 296 (-/-/-); RTC 307 (-/-/-).
90 gur	HLC 3 384 (pl. 145) (-/-/-); RTC 307 (-/-/-).
120 gur	CT 10 50 BM 12248 (AS 7/xi/-); WMAH 4 (ŠS 4/-/-); PPAC 5 625 (-/vii/20); TCTI 2 2785 (-/xi/12); ITT 5 10011 (-/-/-); BPOA 6 37 (-/-/-); HLC 3 384 (pl. 145) (-/-/-).
180 gur	BPOA 6 37 (-/-/-); HLC 3 384 (pl. 145) (-/-/-).
360 gur	BPOA 6 37 (-/-/-); HLC 3 384 (pl. 145) (-/-/-).

As one can notice from the chart above, the amount of barley loaded is often considerably larger than the most common load capacity (and also larger than the maximum load capacity of 108 tons). This means that this massive amount of barley was probably loaded on more than one boat, although the texts do not record the number. Considering that, it is possible to state that every harbour had also a sort of ‘fleet’ where barley was loaded and sent to its final destination. Regarding this last point, as we can see from the chart, the two most documented destinations are Nippur and Ur,²⁷ but these harbours were also important in linking centres within the province.²⁸

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²⁷ This is not surprising as the three provinces were linked by the ‘bala’ taxation system. For ‘bala’ and its connection with water transportation, see Sharlach 2004: 82–90. It is worth pointing out that most of the texts record shipments to the ‘bala’ to Nippur and only a few from Ur. Sharlach nevertheless observed that ‘[t]he accounts of bala expenditures in Ur discussed above demonstrates large-scale expenditures in Ur, so again the paucity of documentation for shipments to Ur must be due to differential preservation of tablets’ (Sharlach 2004: 86).

²⁸ See, for example, CT 5 39 BM 17753 (AS 2/-/-) which records a trip from Gu’abba to Ĝirsu, or DAS 34 (AS 8/iv/-) which records a trip from E-gibile field to Ĝirsu.