

Дарё. Дарё ҳавзаси. Дарё тармоғи

РЕЖА



Дарё ҳавзасининг гидрографик тавсифи

Дарё ҳавзаси. Дарёларнинг тўйиниш манбалари

Оқим гидрографлари. Ўрта Осиё дарёларининг тўйиниш манбалари бўйича тавсифланиши

Дарё тушунчаси

Табиий чуқурликда ҳаракат қиладиган ва доимий сув оқимиға эға бўлган табиий ўзанға **ДАРЁ** дейилади.

Бош дарё ва унинг ирмоқлари

- Ўс $\pi\acute{o}\alpha\grave{\epsilon}\acute{\iota}\epsilon\grave{\iota}\epsilon\grave{\alpha}\grave{\alpha}\grave{\iota}\epsilon\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$, $\grave{\alpha}\grave{\alpha}\acute{\iota}\grave{\alpha}\epsilon\grave{\varsigma}\epsilon\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\grave{\alpha}\grave{\alpha}$ $\epsilon\grave{\upsilon}\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\upsilon\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ **$\acute{\alpha}\acute{\iota}\emptyset$ $\grave{\alpha}\grave{\alpha}\grave{\delta}$** , $\grave{\alpha}\grave{\alpha}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$. $\acute{\Lambda}\acute{\iota}\emptyset$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\kappa\acute{\alpha}\acute{\iota}\grave{\alpha}\grave{\alpha}\epsilon\grave{\iota}$ $\pi\acute{o}\acute{\alpha}$ $\chi\grave{\alpha}\acute{\alpha}\chi\grave{\alpha}\grave{\eta}\epsilon\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\epsilon}\emptyset\epsilon\grave{\alpha}\grave{\alpha}$ $\acute{\alpha}\acute{\iota}\grave{\Gamma}\epsilon\grave{\epsilon}\kappa$ $\chi\acute{\iota}\epsilon\grave{\alpha}\grave{\alpha}$ $\epsilon\grave{\epsilon}\epsilon\grave{\epsilon}$ $\acute{\alpha}\acute{o}\grave{\delta}\acute{o}\chi\grave{\alpha}\grave{\alpha}$ $\acute{\alpha}\upsilon\grave{\epsilon}\grave{\epsilon}\acute{\iota}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$:
- **1. $\acute{\iota}\epsilon\grave{\alpha}\acute{\iota}$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\epsilon\grave{\alpha}\grave{\delta}$ $\epsilon\grave{\alpha}\acute{o}\acute{\iota}\grave{\alpha}\grave{\alpha}\epsilon$** $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\acute{\iota}\epsilon\grave{\alpha}\acute{\iota}$ $\grave{\epsilon}\grave{\epsilon}$ $\acute{\iota}\epsilon\grave{\alpha}\acute{\iota}$ $\acute{\alpha}\epsilon\grave{\epsilon}\acute{\alpha}\acute{\iota}$ $\acute{o}\acute{o}\acute{o}\grave{\alpha}\emptyset$ $\acute{\alpha}\upsilon\grave{\epsilon}\grave{\alpha}\acute{\iota}$ $\grave{\alpha}\grave{\alpha}\acute{\iota}\grave{\alpha}\epsilon\grave{\varsigma}\epsilon\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$. $\acute{\iota}\grave{\alpha}\grave{\eta}\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}$, $\acute{\Lambda}\acute{\iota}\grave{\alpha}\chi\acute{\iota}\acute{\iota}\epsilon\grave{\alpha}$, $\acute{\Lambda}\acute{\iota}\acute{o}\grave{\delta}$, $\acute{\Lambda}\acute{\iota}\acute{\iota}$, $\acute{\Lambda}\acute{o}\acute{\iota}\grave{\alpha}\epsilon$, $\acute{\epsilon}\grave{\alpha}\acute{\iota}\grave{\alpha}$, $\acute{\iota}\epsilon\grave{\epsilon}$ $\grave{\alpha}\grave{\alpha}$ $\chi\acute{\iota}\epsilon\grave{\alpha}\chi\acute{\iota}$.
- **2. $\acute{\epsilon}\acute{\iota}\acute{\iota}\acute{o}\epsilon\acute{\iota}\acute{\alpha}\acute{\iota}\acute{o}$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\epsilon\grave{\alpha}\grave{\delta}$** $\acute{\alpha}\grave{\alpha}\grave{\delta}\epsilon$ $\chi\grave{\alpha}\acute{\alpha}\chi\grave{\alpha}\epsilon\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$ $\grave{\alpha}\grave{\alpha}\acute{\iota}\grave{\alpha}\epsilon\grave{\varsigma}$ $\grave{\epsilon}\grave{\epsilon}$ $\epsilon\grave{\upsilon}\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$ $\epsilon\grave{\kappa}\acute{\iota}$ $\upsilon\lambda\grave{\alpha}\rho\grave{\gamma}\acute{\alpha}\chi\grave{\alpha}$ $\epsilon\tau\acute{\iota}\beta$ $\beta\acute{o}\rho\mu\grave{\alpha}\varsigma\lambda\acute{\iota}\gamma\acute{\iota}$ $\mu\upsilon\mu\kappa\acute{\iota}\nu$. $\acute{\iota}\grave{\alpha}\grave{\eta}\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}$, $\acute{\Lambda}\acute{\iota}\acute{o}\grave{\alpha}\grave{\alpha}\grave{\delta}$, $\acute{\eta}\grave{\epsilon}\grave{\delta}\grave{\alpha}\grave{\alpha}\grave{\delta}$, $\acute{\Lambda}\acute{\iota}\epsilon\grave{\alpha}\grave{\alpha}$, $\acute{O}\grave{\delta}\grave{\alpha}\epsilon$ $\grave{\alpha}\grave{\alpha}$ $\acute{\alpha}\acute{\iota}\emptyset\kappa\grave{\alpha}\epsilon\grave{\alpha}\grave{\delta}$.
- $\acute{\Lambda}\acute{\iota}\emptyset$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\acute{o}\acute{\iota}\epsilon\acute{\iota}\grave{\alpha}$ **$\epsilon\grave{\delta}\acute{\iota}\acute{\iota}\kappa\grave{\epsilon}\grave{\alpha}\grave{\delta}\epsilon$** $\grave{\alpha}\grave{\alpha}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$. $\acute{\epsilon}\grave{\delta}\acute{\iota}\acute{\iota}\kappa\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\acute{\alpha}\acute{\iota}\emptyset$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\epsilon}\emptyset\epsilon$ $\chi\acute{\iota}\epsilon\grave{\alpha}\acute{o}\epsilon\grave{\alpha}\grave{\alpha}$ $\kappa\grave{\alpha}\grave{\delta}\grave{\alpha}\acute{\alpha}$ $\acute{o}\grave{\alpha}\grave{\delta}\acute{o}\epsilon\acute{\alpha}\epsilon\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\acute{\alpha}\upsilon\grave{\epsilon}\grave{\epsilon}\acute{\iota}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$. $\acute{\Lambda}\acute{\iota}\emptyset$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\alpha}\grave{\alpha}$ $\acute{\alpha}\grave{\alpha}\acute{\alpha}\acute{\iota}\grave{\eta}\grave{\epsilon}\acute{o}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}$ $\grave{\alpha}\grave{\alpha}\grave{\delta},\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\acute{\alpha}\epsilon\grave{\delta}\epsilon\acute{\iota}\div\epsilon$ $\acute{o}\grave{\alpha}\grave{\delta}\acute{o}\epsilon\acute{\alpha}\epsilon\grave{\epsilon}$ $\epsilon\grave{\delta}\acute{\iota}\acute{\iota}\kappa\grave{\epsilon}\grave{\alpha}\grave{\delta}$, $\acute{\alpha}\epsilon\grave{\delta}\epsilon\acute{\iota}\div\epsilon$ $\acute{o}\grave{\alpha}\grave{\delta}\acute{o}\epsilon\acute{\alpha}\epsilon\grave{\epsilon}$ $\epsilon\grave{\delta}\acute{\iota}\acute{\iota}\kappa\grave{\epsilon}\grave{\alpha}\grave{\delta}\grave{\alpha}\grave{\alpha}$ $\kappa\acute{o}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\epsilon\grave{\alpha}\acute{\iota}\epsilon\grave{\alpha}\grave{\delta}\epsilon$ $\upsilon\grave{\eta}\grave{\alpha}$ $\epsilon\grave{\epsilon}\epsilon\grave{\epsilon}\acute{\iota}\div\epsilon$ $\acute{o}\grave{\alpha}\grave{\delta}\acute{o}\epsilon\acute{\alpha}\epsilon\grave{\epsilon}$ $\epsilon\grave{\delta}\acute{\iota}\acute{\iota}\kappa\grave{\epsilon}\grave{\alpha}\grave{\delta}$ $\grave{\alpha}\grave{\alpha}\epsilon\grave{\epsilon}\grave{\epsilon}\grave{\alpha}\grave{\alpha}\grave{\epsilon}$ $\grave{\alpha}\grave{\alpha}$ $\chi\acute{\iota}\epsilon\grave{\alpha}\chi\acute{\iota}$

Дарёларнинг қисмларга бўлиниши

Ҳаёт қайтадан аао, ие, оиёиā осоёеēәә әүеē÷ә, әеō әеōеәәи оаоқ қеēәәēәәи оиоиеē ааēәеēәоēәә қаоәә, қоēеәәәә о÷ қеñиāә әүеēенади:

Юқори оқим

Оиғ аао, еаоёеиёиā **рқиде иқеиёәоо** о÷ои иёñааооәи еаооә иеøааеēеēәо õиñ әүеēә, оо оооәеēе ñоâиёиā иқеø оаооеēәе ҳаи аи÷ә еаооә әүеәәе. Ао үñә ўс иааааооәәә ўсаиāә үдйеү әаоә, иеиёиā әаәәә әиоеøеәә иеәә еаеәәе

Ўрта оқим

Аао, иеиā ўооә иқеиёәә оиёиā иеøааеēеәә әә ñоâиёиā иқеø оаооеēәе еаиәүәе. Ўиā иоҳеиē, аао, иеиā ñоâеēеēеәә иооәәе

Қуйи оқим

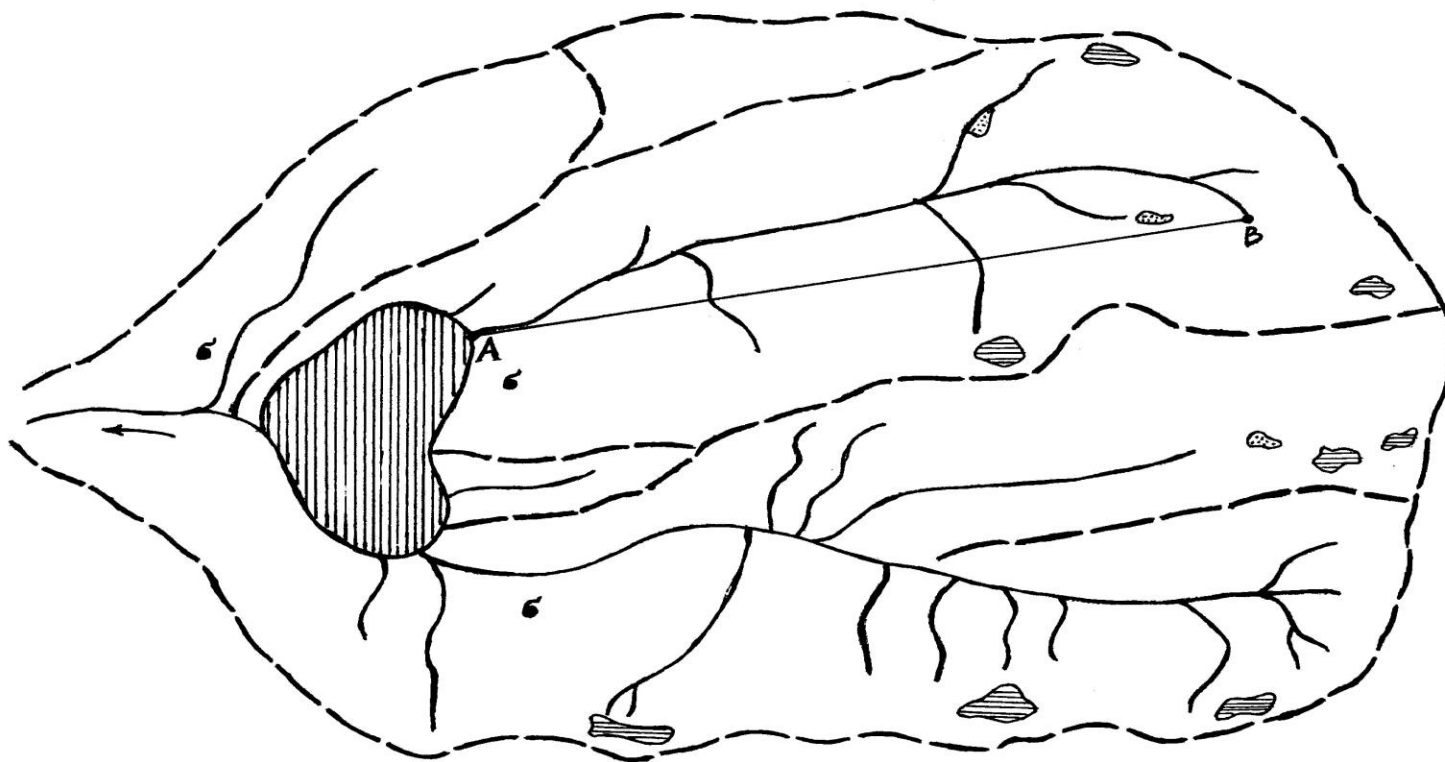
Аао, иеиā **қоēе иқеиёәә** иеøааеēеәә әә ñоâиёиā иқеø оаооеēәе үиāәә еаиәүәе. Ао қеñиāә оаооеēе еаиәеēеø иаоеәәñеәә иқеооқеәо ÷үеә әиоеәеәе. Аеñәоēеүо ҳиёеәоәә дарёнинг қуйи оқимида аао, осоёеēеәә әүеē÷ә оиāәәәе ñоâ иеқәиоē еаиәү әиоәәе.

Дарё тармоғи чизмаси



Дарё тармоғи(системаси) ва гидрографик тўр

Маълум бир худудаги дарёлар, уларнинг ирмоқлари, булоқлар, кўллар, ботқоқликлар, музликлар, доимий қорликлар шу худуднинг гидрографик тўрини ҳосил қилади. Демак, дарё системаси гидрографик тўрнинг бир қисмидир.



8-расм. Дарё системаси ва гидрографик тўр.

- дарёлар, — тоғ тизмалари(сувайирғичлар),
- ☞ музлик, ☞ кўллар, ☞ булоқлар,
- ☞ сув омборлари, ← дарё оқими йўналиши.

Дарёларнинг бошланиши

Булоқлар

Сизот сувлари

Ботқоқликлар

Кўллар

Доимий қор ва музликлар

Дарё тармоғи хусусиятлари:

Узунлиги

Дарёларнинг бошланиш еридан қуяр еригача бўлган умумий масофаси унинг узунлиги дейилади

Дарё сойларининг зичлиги

- Дарё ва сойларнинг зичлиги (D) унинг зичлик коэффиценти билан белгиланади ва маълум худуддаги дарёлар, сойлар, жилғаларнинг умумий узунлигининг (ΣL) шу худуд майдонига (F) бўлиб топилади, яъни:

$$D = \Sigma L / F$$

Дарёларнинг эгри-бугрилиги

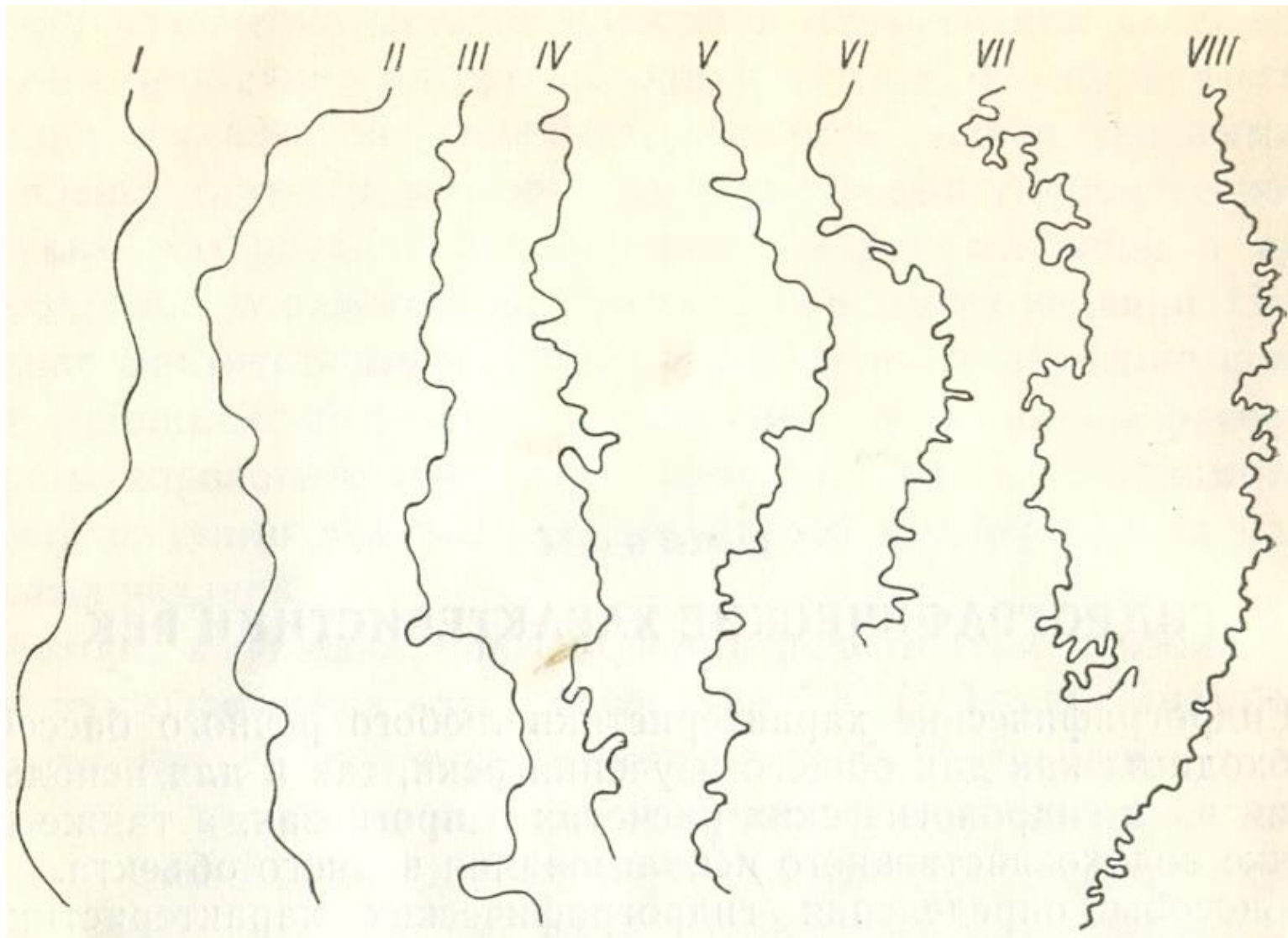
- Дарёларнинг эгри-бугрилиги эгри-бугрилик коэффиценти (R_3) билан тавсифланади.

- $R_3 = L / AB$

Дарёнинг нишаблиги

Агар, i нуқтадаги h , o нуқтадаги h_2 бўлса h_1 қанчалик h_2 га фарқ қилса $h_1 - h_2$ фарқи шунинг L узунлигига қараталиниши бу нишабликнинг аниқлиги бўлади.

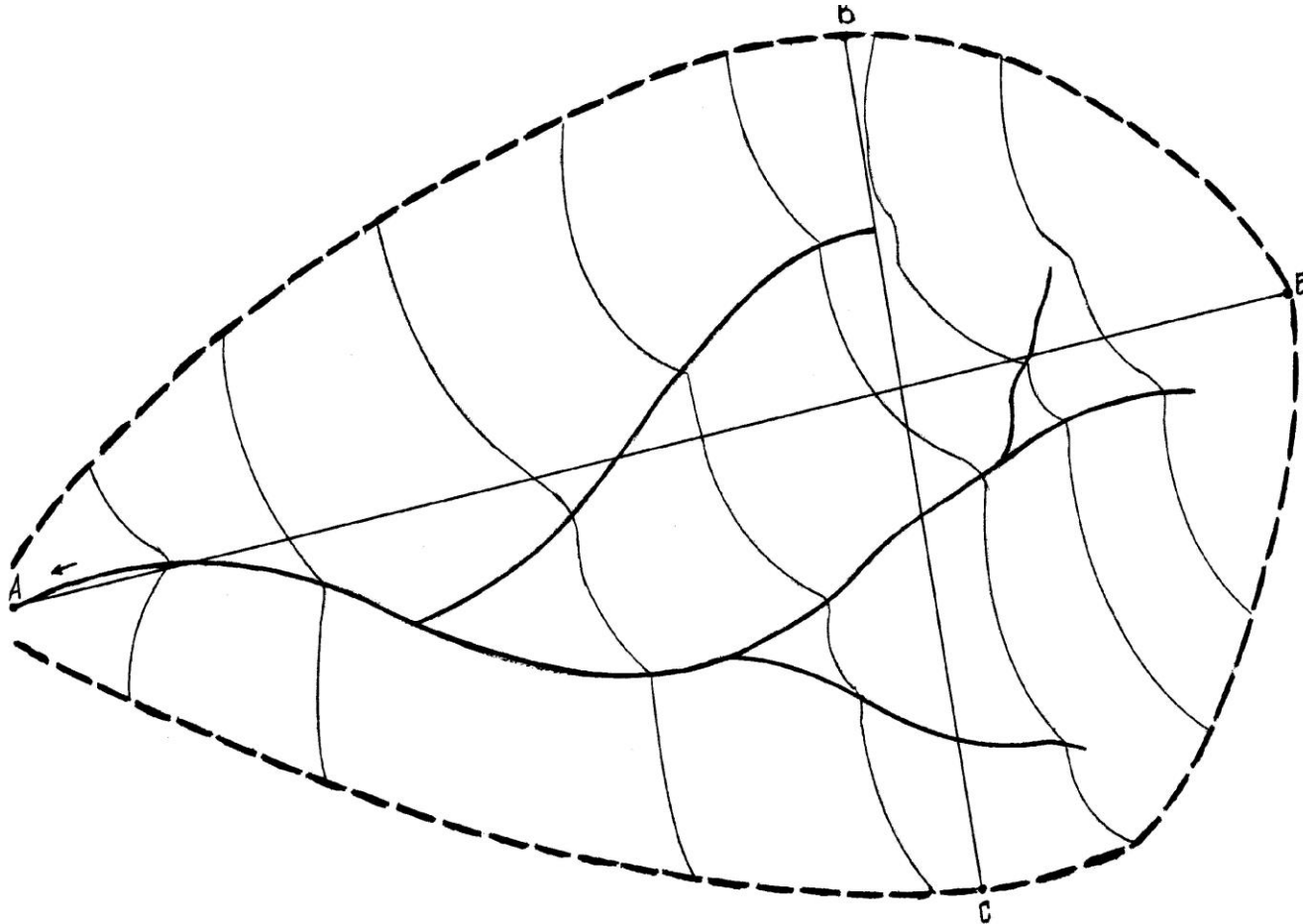
$$i = \frac{h_1 - h_2}{L} = \frac{\Delta h}{L}$$



Дарёларнинг эгри-бугрилиги

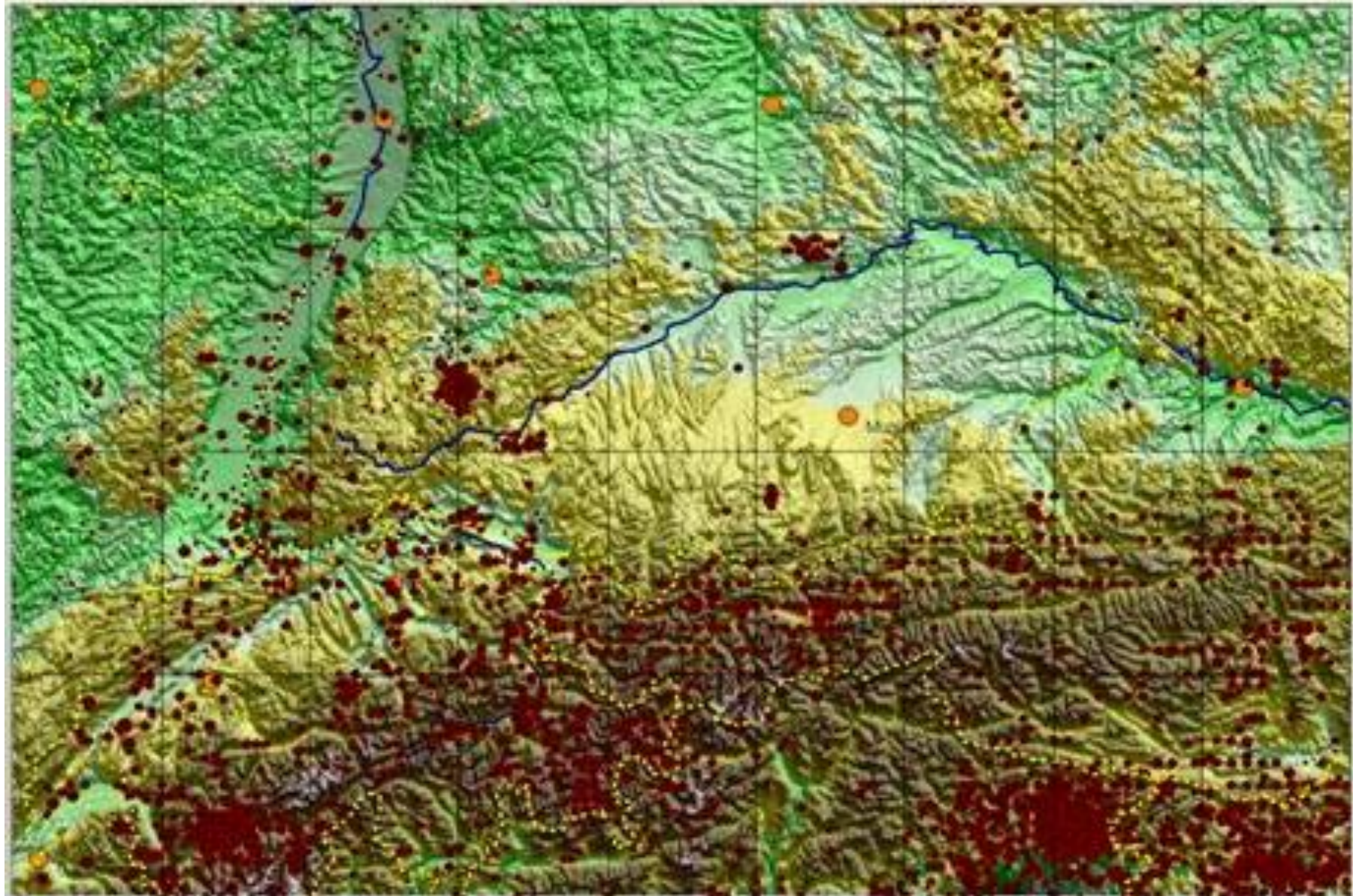
Дарё хавзаси

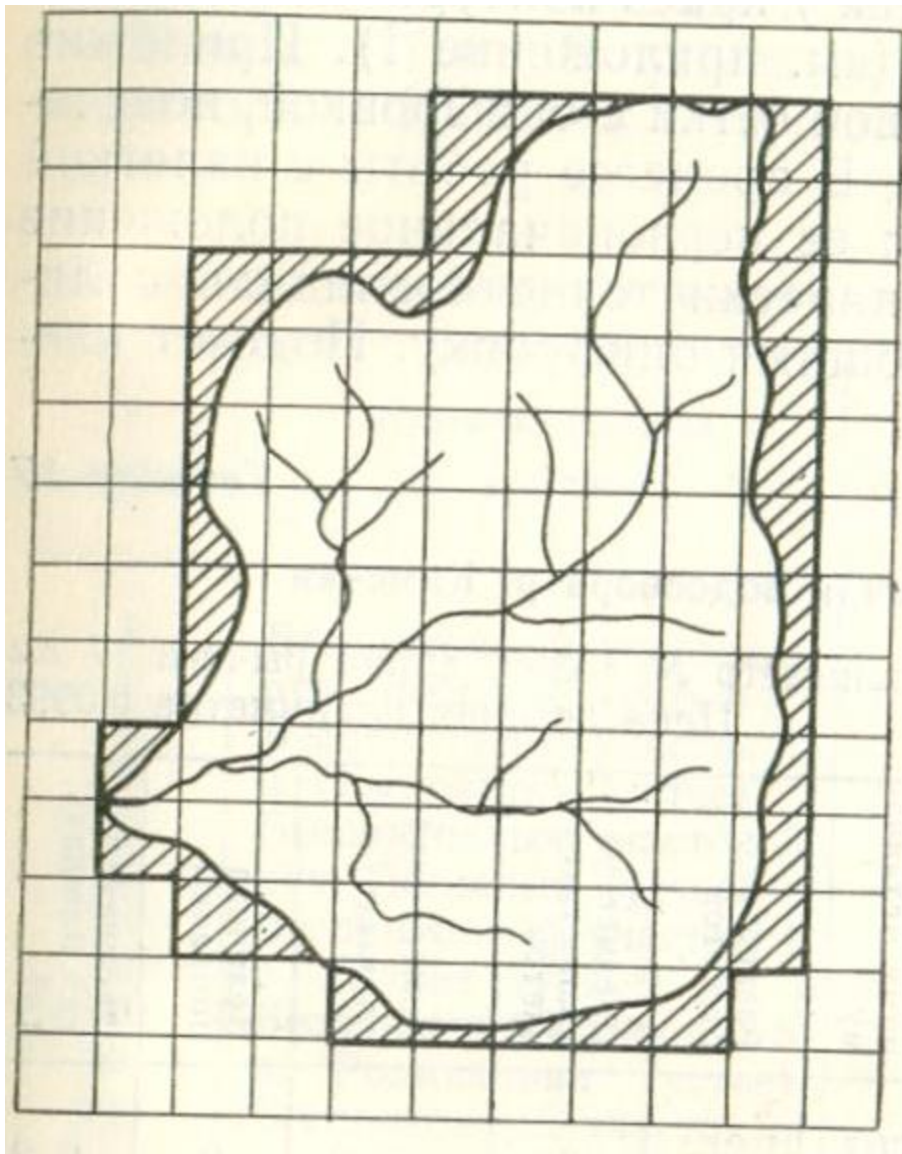
Қўшни дарё ҳавзасидан сув айиргич билан ажралган ер юзасининг бир қисми шу тармоқнинг **дарё ҳавзаси** деб аталади.



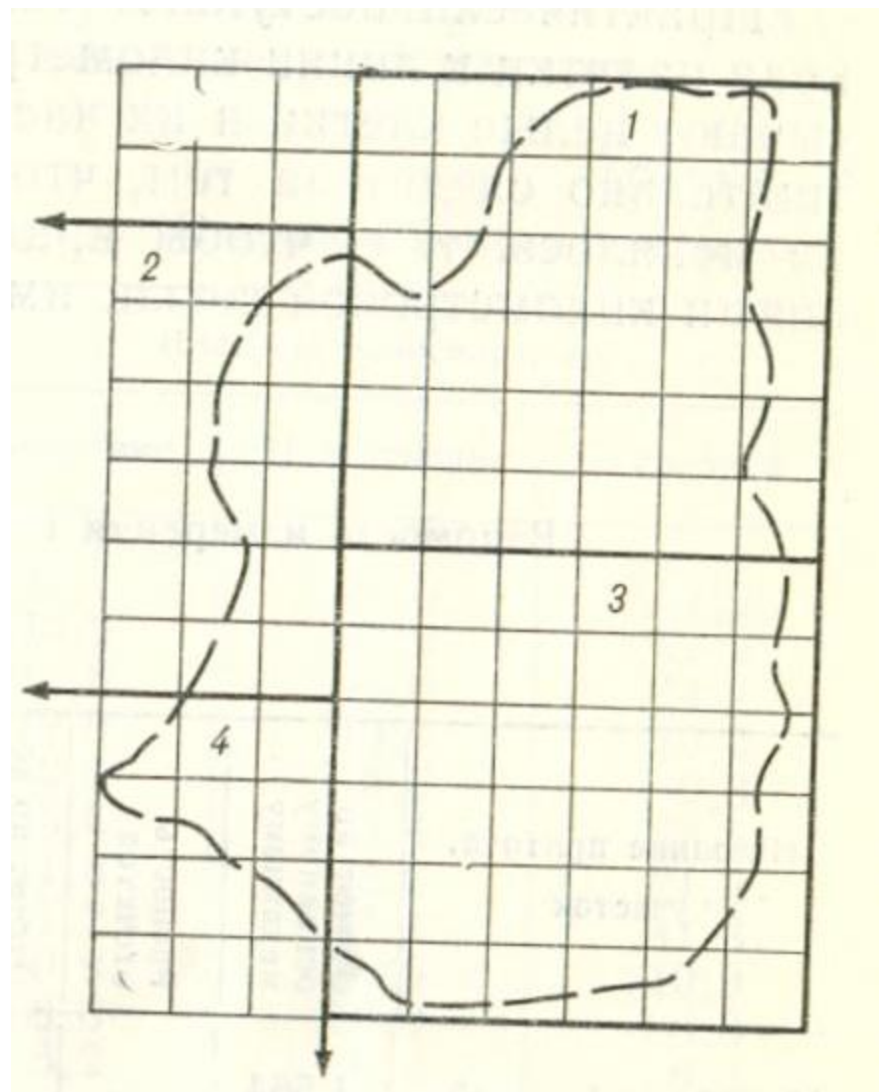
9-расм. Дарё ҳавзаси.

~ дарёлар, -- сувайирғичлар,
~ горизонталлар, ← дарё оқими йўналиши.
АБ ҳавзанинг узунлиги, ВС ҳавзанинг максимал кенлиги

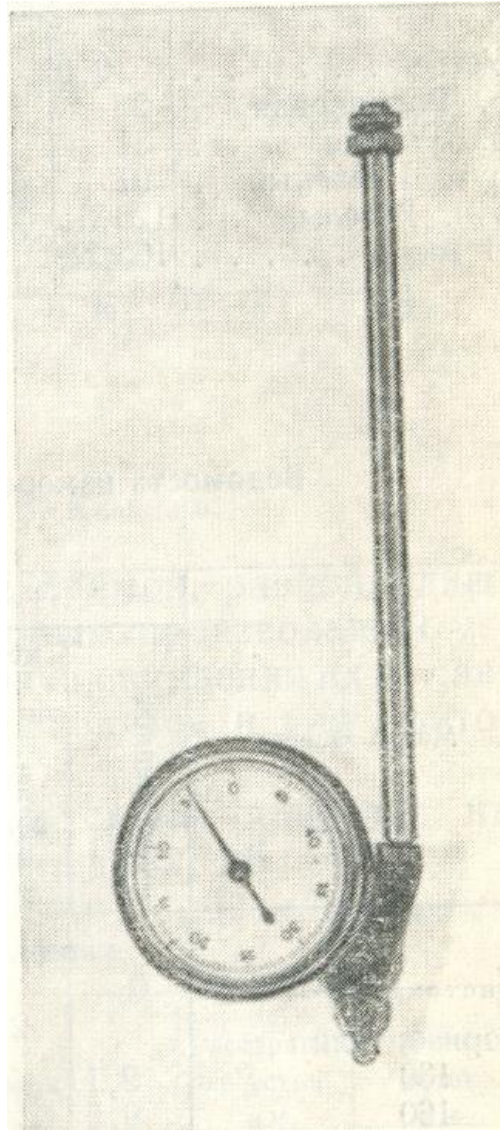




Планиметрлаш орқали дарё ҳавзасининг
майдонини аниқлаш

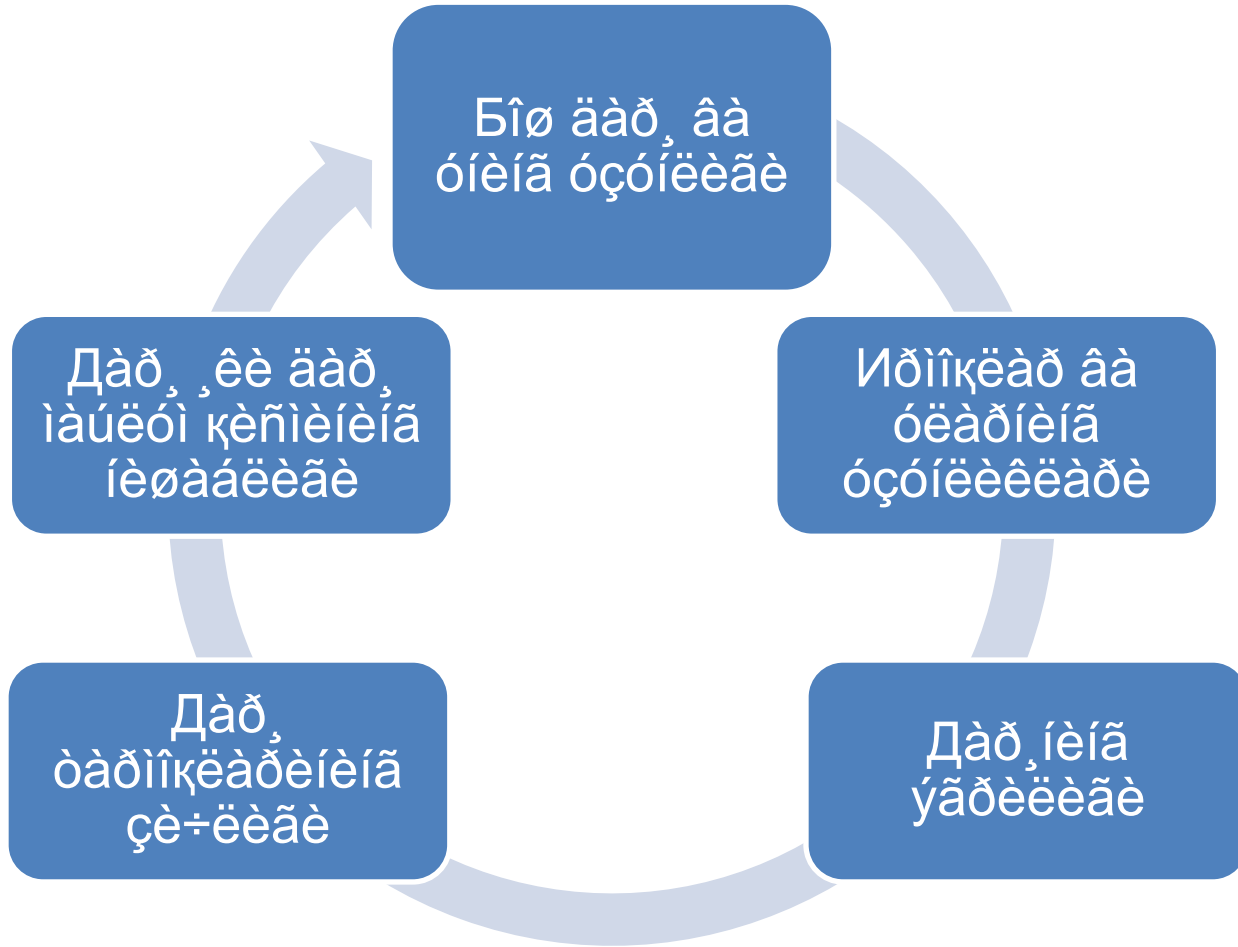


Палетка орқали дарё ҳавзасининг
майдонини аниқлаш



Токомиллаштирилган КС кувриметри

Äàď, çàâçàñèíèíã асосий øàêë âà ÿë÷àì êÿďñàòèè÷-ëàðè



Дарё водийси ва ўзани

Дарёлар, одатда сойликдан оқади. Бундай сойлик дарё водийси деб аталади.

- $\text{À}\grave{\text{a}}\check{\text{d}}, \text{â}\text{î}\grave{\text{e}}\acute{\text{e}}\text{ñ}\grave{\text{e}} \text{ñ}\acute{\text{o}}\text{â} \text{î}\text{ç}\grave{\text{e}}\grave{\text{i}}\grave{\text{e}}\acute{\text{i}}\acute{\text{e}}\text{ã} \text{å}\check{\text{d}} \text{ñ}\grave{\text{e}}\check{\text{d}}\grave{\text{e}}\grave{\text{e}}\grave{\text{a}}\grave{\text{a}} \text{á}\grave{\text{a}}\text{æ}\grave{\text{a}}\check{\text{d}}\check{\text{a}}\text{á}\text{í} \text{è}\text{ø}\grave{\text{e}} \text{í}\grave{\text{a}}\check{\text{d}}\grave{\text{e}}\text{æ}\grave{\text{a}}\text{ñ}\grave{\text{e}}\grave{\text{a}}\grave{\text{a}} \text{â}\acute{\text{o}}\text{æ}\acute{\text{o}}\check{\text{a}}\check{\text{a}} \text{é}\text{â}\grave{\text{e}}\grave{\text{e}}\acute{\text{a}}, \text{â}\check{\text{a}}\check{\text{d}}, \text{í}\grave{\text{e}}\text{í}\check{\text{ã}} \text{á}\text{í}\text{ø}\grave{\text{e}}\acute{\text{a}}\text{í}\text{è}\text{ø}\grave{\text{e}}\grave{\text{a}}\text{á}\text{í} \text{ç}\acute{\text{o}}\acute{\text{e}}\grave{\text{e}} \text{ç}\grave{\text{e}}\text{ñ}\grave{\text{i}}\grave{\text{e}} \text{ò}\text{í}\text{í}\text{í} \text{é}\text{â}\check{\text{d}}\check{\text{a}}\text{á}\text{í} \text{ÿ}\text{ñ}\text{ñ}\grave{\text{e}} \text{,} \text{í}\text{á}\grave{\text{a}}\text{ç}\grave{\text{e}}\check{\text{d}}\grave{\text{e}}\acute{\text{a}}\check{\text{d}}\grave{\text{e}} \text{â}\grave{\text{a}} \text{í}\text{è}\text{ø}\grave{\text{a}}\acute{\text{a}}\grave{\text{e}}\grave{\text{e}}\text{ã}\grave{\text{e}} \text{á}\grave{\text{e}}\grave{\text{e}}\text{á}\text{í} \text{ð}\grave{\text{a}}\check{\text{d}}\text{â}\text{è}\check{\text{d}}\check{\text{e}}\text{â}\text{í}\text{á}\text{ã}\grave{\text{e}}. \text{Í}\text{à}\acute{\text{u}}\grave{\text{e}}\acute{\text{o}}\text{í}\text{é}\grave{\text{e}}, \text{è}\text{è}\text{è}\text{è} \text{â}\check{\text{a}}\check{\text{d}}, \text{â}\text{î}\grave{\text{e}}\acute{\text{e}}\text{ñ}\grave{\text{e}} \text{ÿ}\text{ç}\text{â}\check{\text{d}}\text{í} \text{é}\text{â}\text{ñ}\grave{\text{e}}\text{ø}\text{í}\text{á}\text{é}\text{ã}\grave{\text{e}}, \text{é}\text{â}\text{è}\text{e}\text{í} \text{ó}\text{é}\text{â}\check{\text{d}} \text{á}\text{è}\check{\text{d}}\check{\text{a}}\text{è}\text{è}\text{è}\text{â}\grave{\text{a}} \text{ó}\text{í}\text{ó}\text{í}\text{è}\text{é} \text{â}\text{î}\grave{\text{e}}\acute{\text{e}}\text{é}\text{í}\text{è} \text{ò}\text{à}\text{ø}\text{è}\text{è}\text{è} \text{ç}\grave{\text{e}}\text{è}\text{è}\text{ø}\grave{\text{e}}\acute{\text{a}}\check{\text{d}}\grave{\text{e}} \text{ì}\text{ó}\text{í}\text{è}\text{è}\text{í}.$

Дарё водийсининг сув тўлиб оқадиган қисми дарё ўзани деб айтилади.

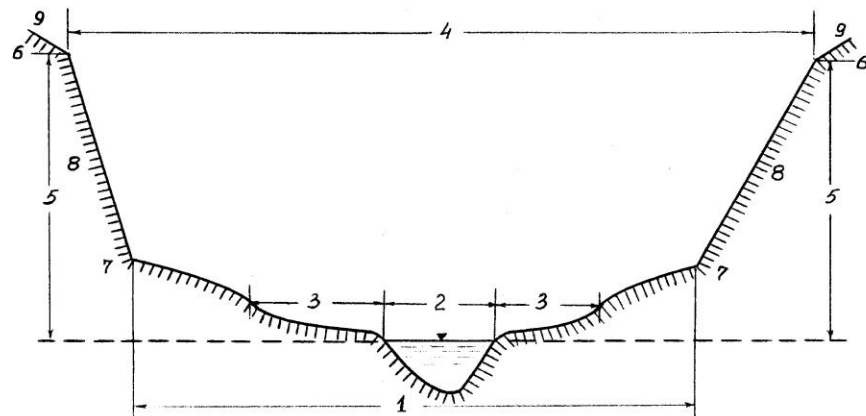
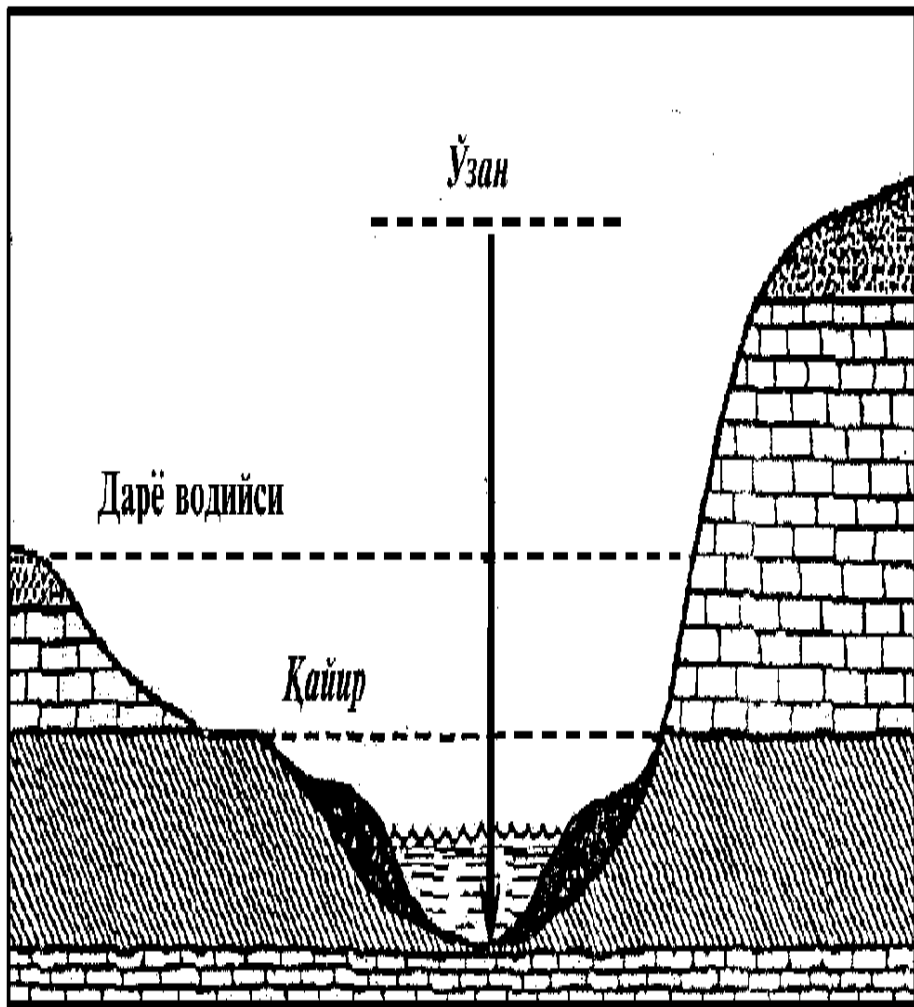
Ўзанлар:

- Барқарор- кўндаланг кесим шакли вақт оралиғида ўзгармайди
- Беқарор - енгил ювилувчан жинслардан тузилганлиги учун анчагина ўзгаради
Дарё ўзанининг барқарорлиги қуйидагиларга боғлиқ:
- ўзанни ташкил этган заррачаларнинг катта-кичиклигига,
- дарё нишаблигига,
- сув тошқинларига,
- Антропоген таъсирларга.

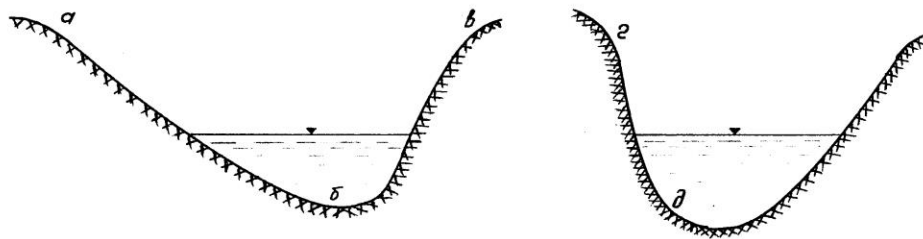
Ўзаннинг тошқин вақтида сув тагида қолган қисмига қайир дейилади.

Бир дарё ҳавзаси билан иккинчи дарё ҳавзасини ажратиб турадиган жойлар сув айиргичлар дейилади.

Дарё водийсининг тузилиши чизмаси



11-расм, А. Дарё водийсининг кўндаланг қирқими
 1—водий туби, 2—дарё ўзани, 3—қайир,
 4—водий кенгаги, 5—водий баландлиги,
 6—водий қоши, 7—ёнбағир пойи,
 8—водий ёнбағирлари, 9—водийга туташ ерлар.



11-расм, Б. Дарё қирғоғининг турлари
 аб—ётиқ қирғоқ, бв—нисбатан тик қирғоқ,
 гд—жарсимон қирғоқ.

Дарё водийсининг элементлари

Дàð, *ўçàíè*-âîäèéíéíã îçàð ñóâ ýãàëëäãáí çèñìè

Καέèð-ääð, äà òíøçèí , èè òýëèí ñóâ êóçàòèëãáíäà âîäèéíéíã ñóâ áîñàäëãáí çèñìè

Bîäèé òóáè-ääð, *ўçàíè* âà çàéèð áèðãàëëèäà âîäèé òóáè äãá àòàëäè

Tàððàñàèàð, íáàçèðèäðäããè ãíðèçííòàè , èè áèð îç çèýëëèèà ýãà áýëãáí ìáéáí÷àèàð;

Ëíáàçèðèäð-âîäèé òóáèè èèèè , íááí ÷ããàðèèäà òóðóã÷è àà ãàð, ãà çàðáá çèý æèéèàøãáí ìáéáíèàð

Bîäèé çíøè-âîäèé óçóíèèèè áýéè÷à , íáàçèðèäðíéíã ýíã çíðè òóçàèèèèè òóòàøðèðóã÷è ÷èçèç

Tàëüããã-ääð, óçóíèèèè áýéè÷à *ўçàíäããè* ýíã ÷óçóð òóçàèèèèè òóòàøðèðèèèè ýãðè ÷èçèç

Дарёларнинг тўйиниш манбалари

Ўмғирлар

Ер ости
сувлари

Дàđ, ëàđ
òўéèéìèøèéíèíã òўđò
ìàíáàè

Қор қатлами

Тоғлардаги қор ва
музликлар

Мустақил ишлаш учун топшириқ

1. Дарё ҳавзасида кечадиган сув эрозияси ва унинг таснифлари
2. Дарёларнинг энергияси ва иши