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LAND USE AND EXOGENOUS PROCESSES IN THE SOUTH OF EAST SIBERIA

Entrainment of aeolian sands

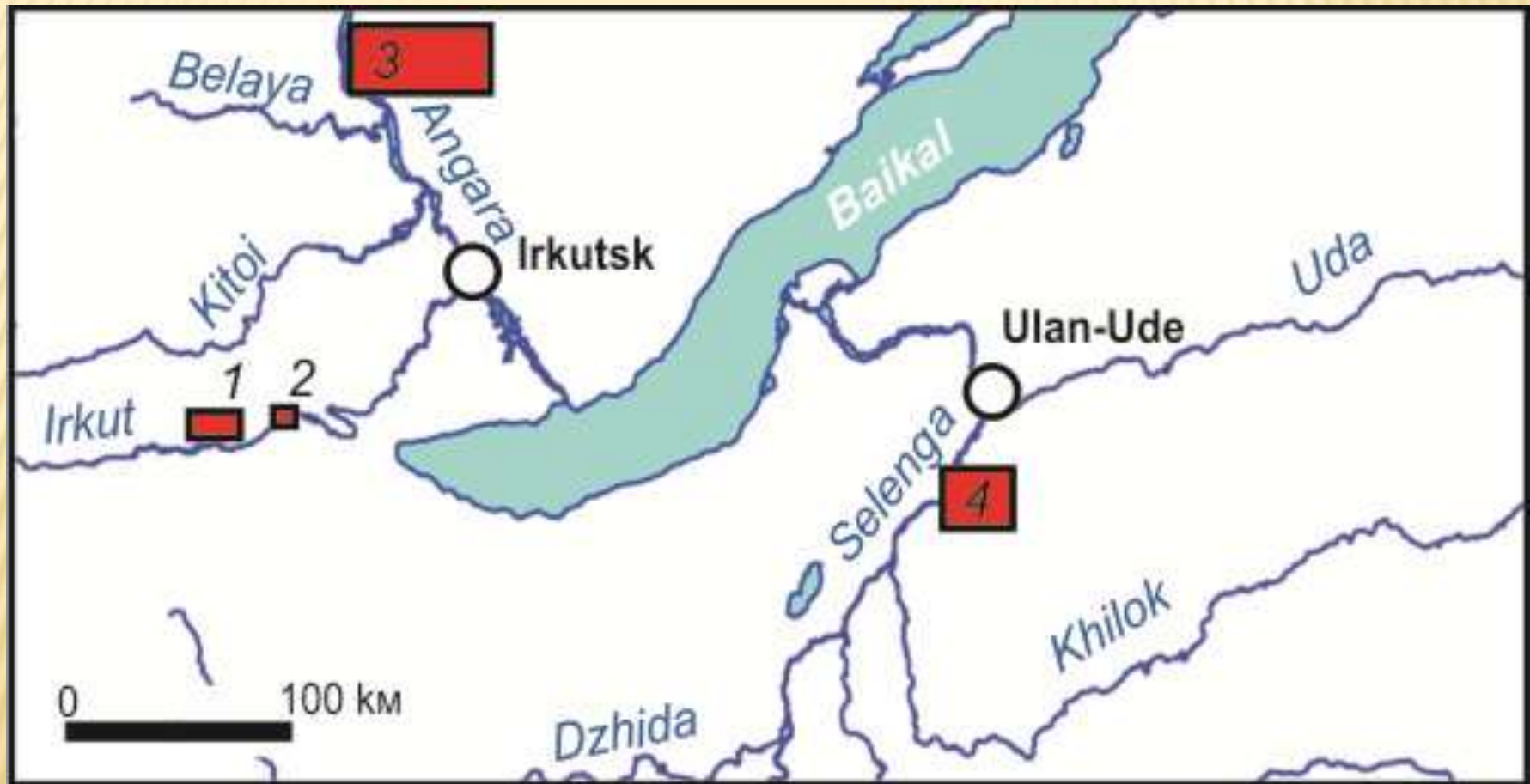


Intercommunication of aeolian and water-erosion processes





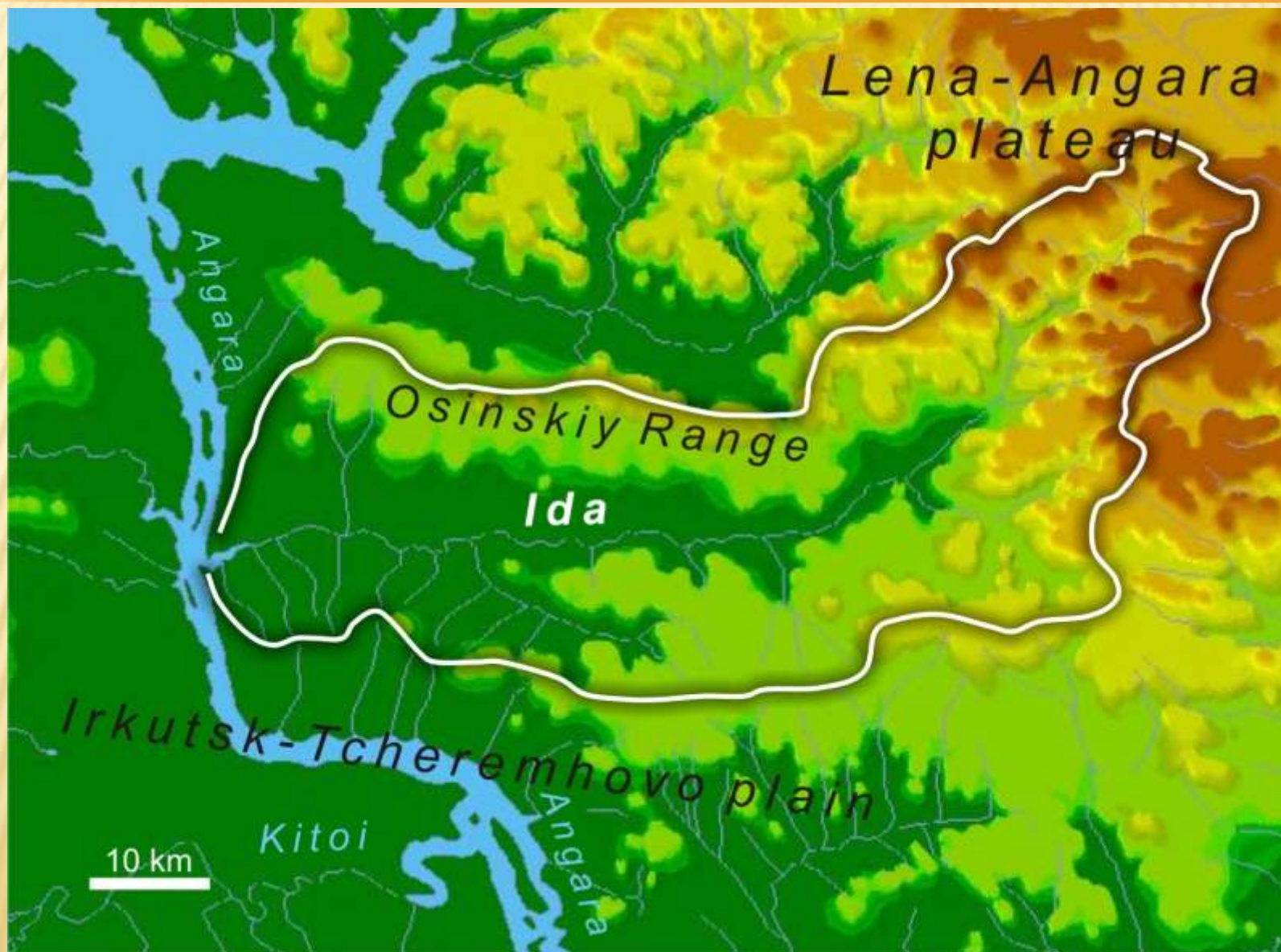
Location of the study areas in the South of East Siberia



1 – Zatunka; 2 – Yelovka; 3 - Ida; 4 - Kuitunka



Drainage basin of the Ida river

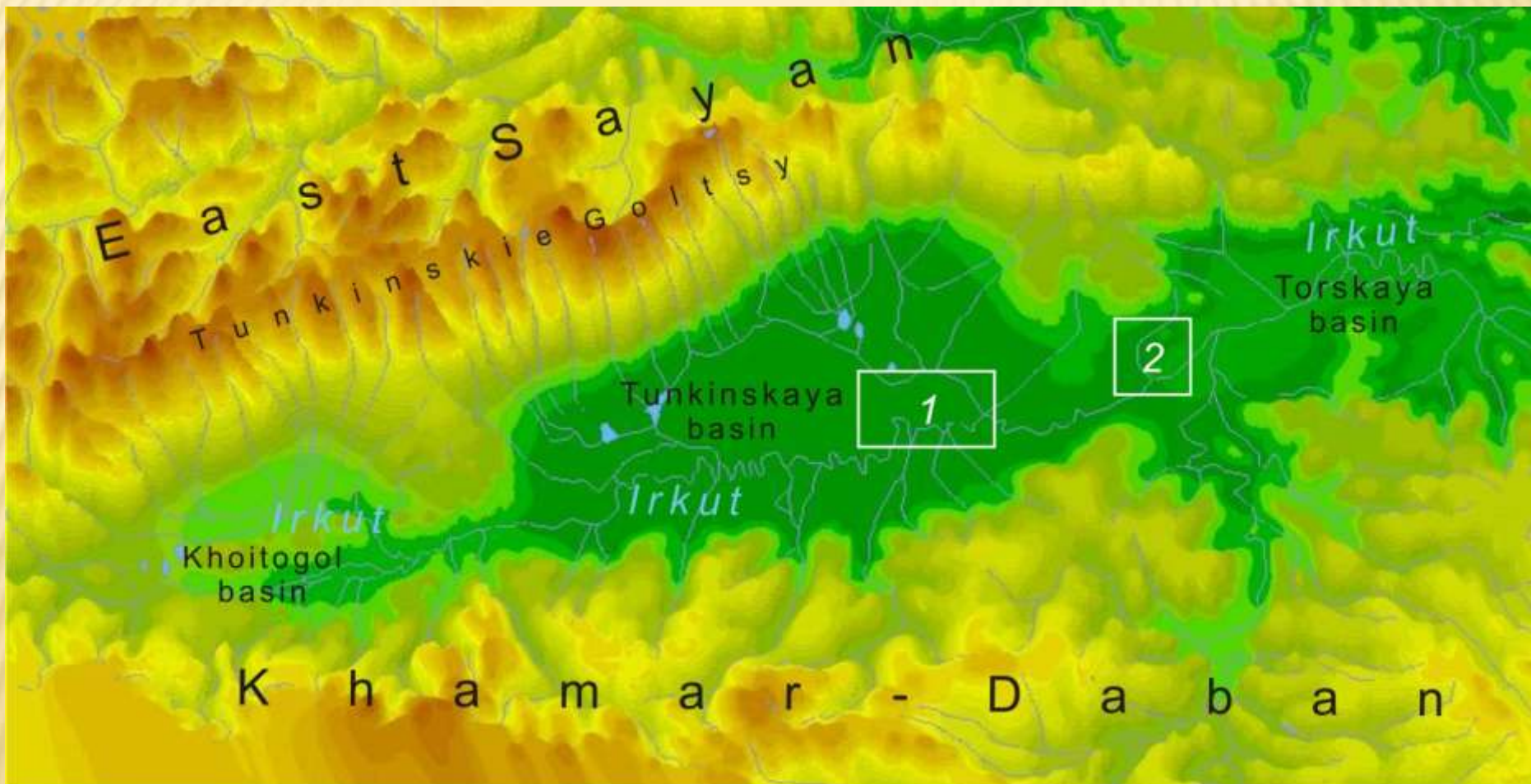




Little gullies on slope of river terrace



Location of the study areas in Tunkinskaya basin

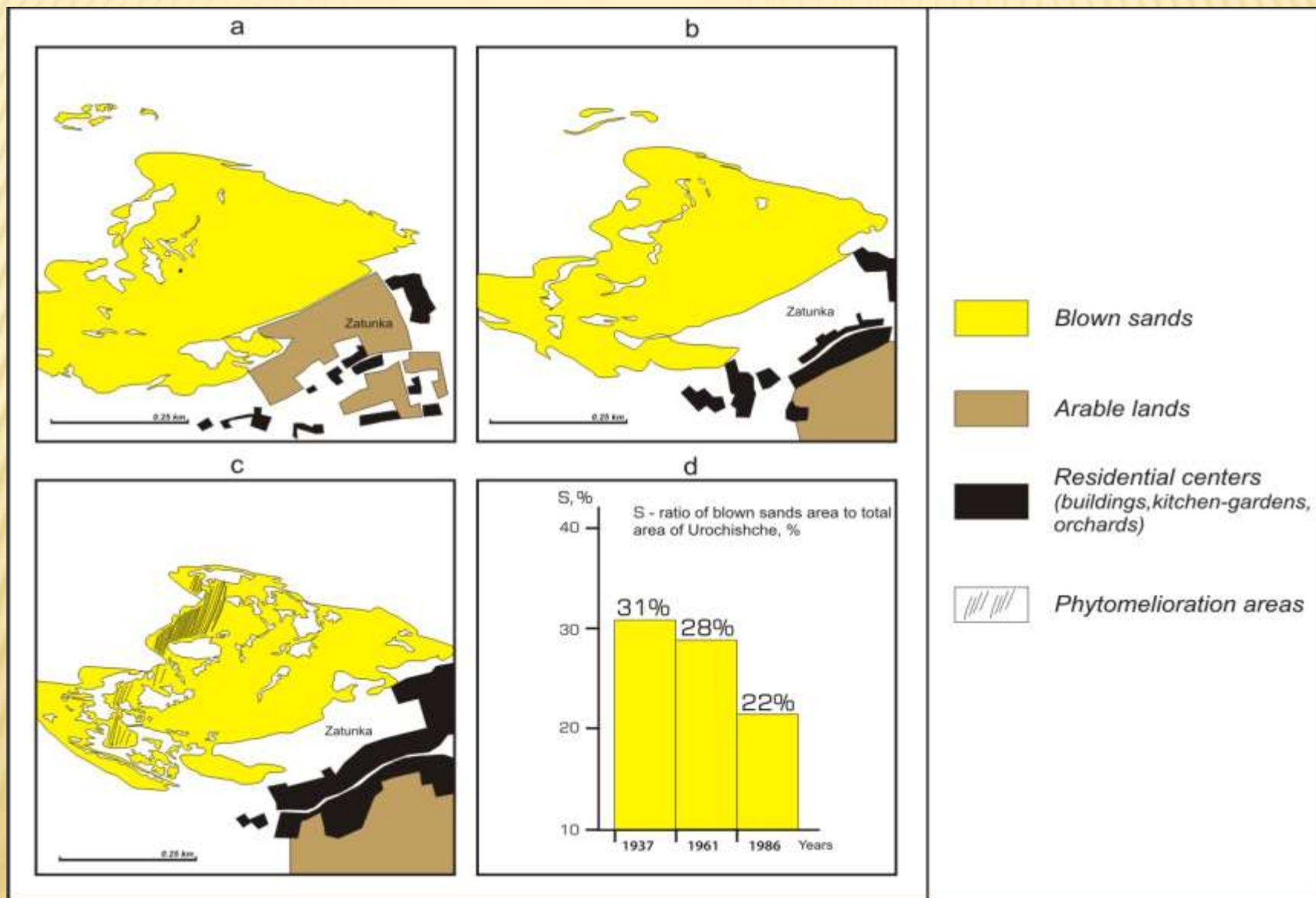


1 - Zatunka; 2 - Yelovka



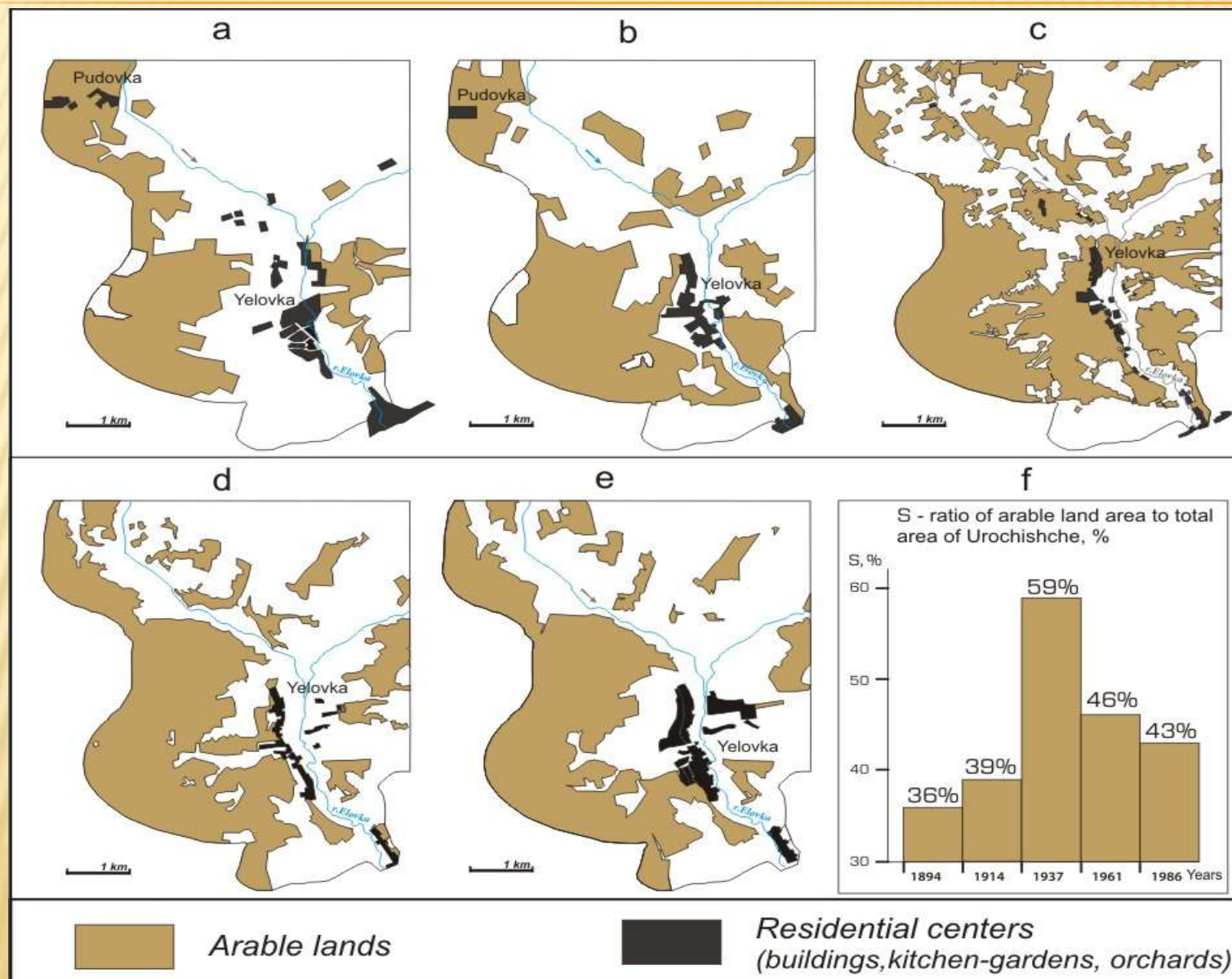
Dynamics of blown sands at Urochishche Zatunka

a - 1937; b - 1961; c - 1986; d - area ratio of blown sands for different years.





Dynamics of the areas of arable lands and residential at Urochishche Yelovka (a - 1894; b - 1914; c - 1937; d - 1961; e - 1986; f - area ratio of blown sands for different years).





Drainage basin of the Kuitunka river



Big gully between arable lands



SUMMARY

At this stage the influence of the land use patterns on the development of aeolian and slope water-erosion processes of the South of East Siberia under investigation should be considered the most important anthropogenic factor of impact on relief formation.

From the foregoing discussion it transpires that in the steppe and forest-steppe landscapes of the South of East Siberia the activity of aeolian and slope water-erosion processes in the 20th century underwent substantial changes – it increased with increasing anthropogenic loads on landscapes (tree felling, fires, expansion of the areas of arable lands, and overgrazing) and decreased with decreasing anthropogenic loads.

Today the trend is to overgrowth of sands in naturally occurring landscapes.

First stage of overgrowing with bushes on aeolian sands



Stopping aeolian processes in result of phytomelioration



Thank you!

