Equal Earth Projection: Choose the Map's Purpose First

Geography and international institutions | News context: 4 September 2026

A flat map cannot show the Earth's round surface entirely without distortion. So while reading a map it is necessary to ask which property it preserves.

Why in the News

On 4 September 2026, the United Nations General Assembly adopted a resolution encouraging the use of maps that show the relative size of landmasses correctly. The Equal Earth projection was given special importance. The resolution passed with 164 votes, one against and six members abstaining. It is not a binding order changing all maps or banning the Mercator projection.

What does an equal-area projection do?

A projection is the mathematical method of showing the Earth's places on a flat plane. In an equal-area projection, the ratio of the areas of different landmasses is preserved. This does not mean their shapes, every direction or every distance will also be right at the same time.

Key Facts

The special feature of Equal Earth: presented in 2018, it is an equal-area pseudo-cylindrical projection for world maps. It is inspired by the balanced visual composition of the Robinson projection, but unlike it, preserves the relative size of areas.

The problem of false comparison: in some projections, areas at high latitudes appear excessively large. Choosing such a map for comparing areas can mislead the reader's perception. Usefulness should be judged against the map's purpose.

No universal winner: equal-area is useful for comparing the sizes of the world's landmasses. For another purpose, a different projection may be appropriate. An improvement in one property does not end every kind of distortion.

Original free concept illustration. No boundaries are shown.

Importance in reading geography and understanding policy

Visual literacy: looking big is not always being big in actual area. A student should compare only after seeing the map's legend, scale, purpose and projection.

Thematic presentation: in a study comparing regions spatially, a suitable base map is essential. Stating the choice of projection tells the reader which comparison is trustworthy and where caution is needed.

A question apart from boundaries: a projection is a method of showing landmasses. The validity of a political boundary line, or the question of sovereignty over an area, is separate. Changing the method is not by itself changing an official stance on boundaries.

Analysis and Way Forward

It will be useful to write the projection's name and its limit in teaching material. For claims about area, an equal-area map; for other tasks, the method suited to that task should be chosen. Instead of treating the readily visible shape on a digital map as indisputable reality, it is necessary to read the choices behind its making. The General Assembly's initiative should be seen as an opportunity to raise map literacy, not as making one method the solution for every task.

Distinction of Concepts

Equal area does not mean equal shape. Recommending a change of projection and deciding to change political boundaries are also different things.

Mains Perspective

In an answer, connect the definition of a projection, the area-shape trade-off and purpose-based selection. Do not remain limited to the discussion of Africa's size alone.

UPSC CSE Mains style: original practice question

"A map's accuracy should be judged with reference to its purpose." Explain this statement on the basis of the usefulness and limits of equal-area projections.

(Answer in 150 words) | 10 marks

Answer Outline

Introduction: Mention the distortion in showing the Earth on a flat map; link accuracy to a specific use such as area, shape or distance.

Main Body: Equal-area projections preserve the relative area of landmasses, so they are useful for comparing size. Give the example of Equal Earth; explain how the enlarged look of high latitudes can mislead comparison. Correct area does not mean shape, direction and every distance are correct at the same time. For thematic study and other work, choose the method that suits the purpose; the legitimacy of political boundaries is a question separate from the projection.

Conclusion: Suggest that teaching and policy maps state the projection, scale, purpose and limits clearly. Do not make any one projection the universal winner; choose the measure and presentation suited to the comparison being claimed.

Sources

- United Nations General Assembly: account of the meeting of 4 September 2026
- UN News: the meaning and limits of the map resolution, 4 September 2026
- Original research: The Equal Earth map projection, 2018

Remember: showing relative areas correctly is useful, but no flat projection preserves every property completely.