

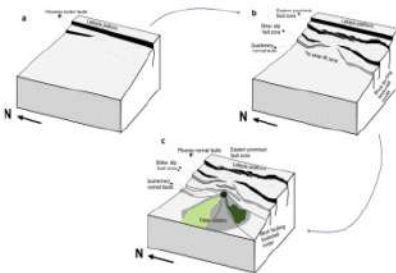


BARINGO GREAT RIFT VALLEY - ASPIRING GEOPARK KENYA

PAKA: A VOLCANO SHIFTING CONTINENTS

Paka Volcano: Where Africa is Splitting Apart

Rising from the floor of the Great Rift Valley, Paka Volcano is a powerful reminder that the Earth beneath Kenya is alive and moving. This isn't just a mountain; it is a shield volcano created by hundreds of thousands of years of volcanic activity controlled by fault lines as the continent slowly pulls apart.



From Fire to Steam: A Natural Power Plant

Paka's story began over 580,000 years ago. Massive eruptions originally spread lava across the plains, eventually building the high peak we see today. Roughly 37,000-38,000 years ago, powerful explosive eruptions triggered the summit collapsed inward about 200m, creating 1.5 km caldera along with two distinct craters on its eastern and western

rims.

Although the last volcanic eruption was recorded approximately 8,000 years ago, Paka remains active today, but its power is mostly hidden deep underground, hot magma heats water trapped in rocks, creating a powerful natural power plant.



"(after Dunkley et al., 1993)"

This hidden energy reaches the surface as:

- Fumaroles – cracks releasing hot steam.
- Steaming ground – warm areas where heat escapes through the soil.

This map shows the active geothermal and volcanic features of the Paka region, where heat from deep within the Rift Valley emerges at the surface through earth cracks, hot ground and fumaroles.

Paka is a natural source of geothermal energy, where heat from deep within the Earth can be harnessed to generate electricity. This makes it a key site for Kenya's renewable energy future.

