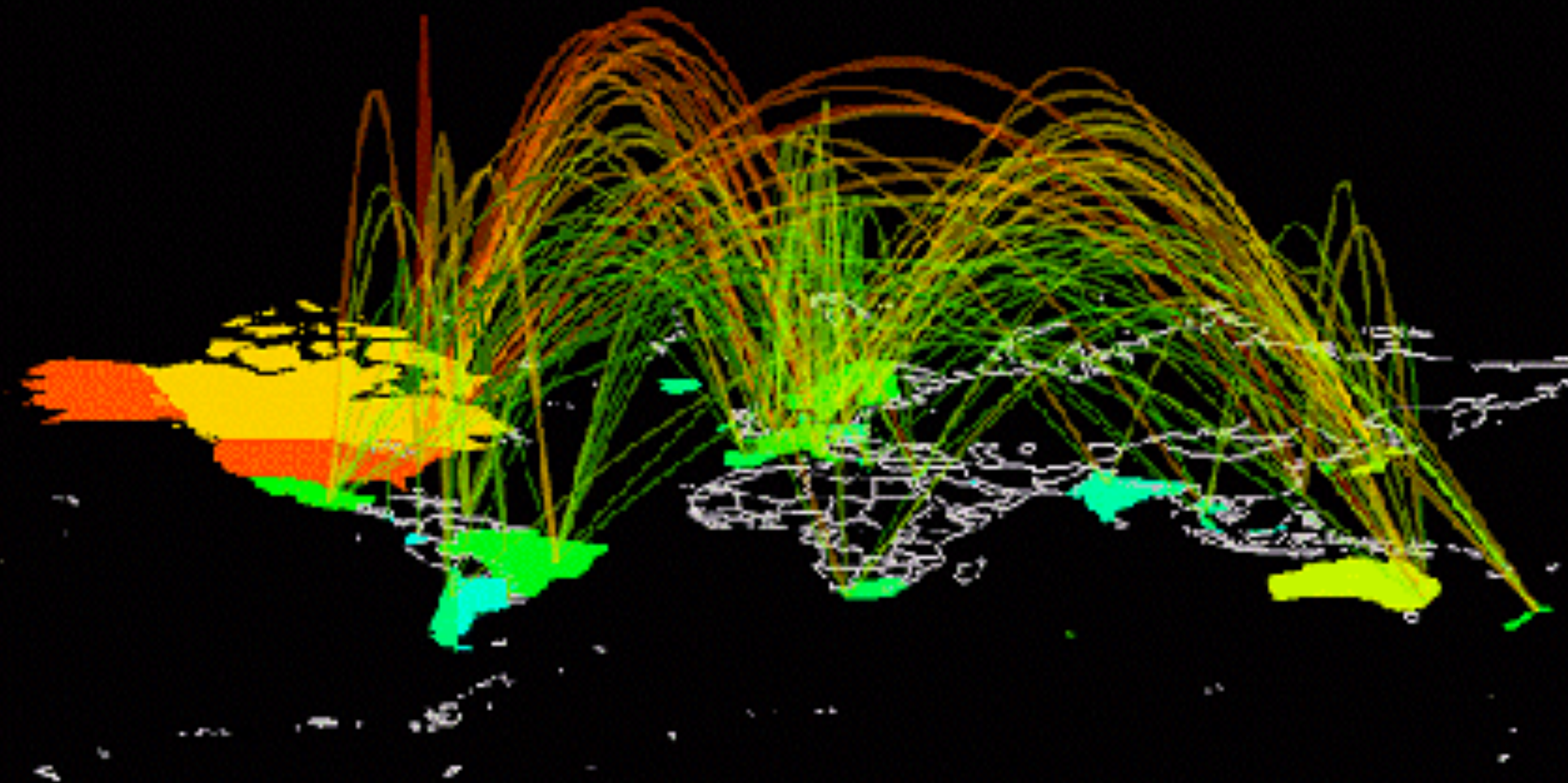




MESH

A proposal voor a campagne on the
“digital divide”

visualising the “digital divide”



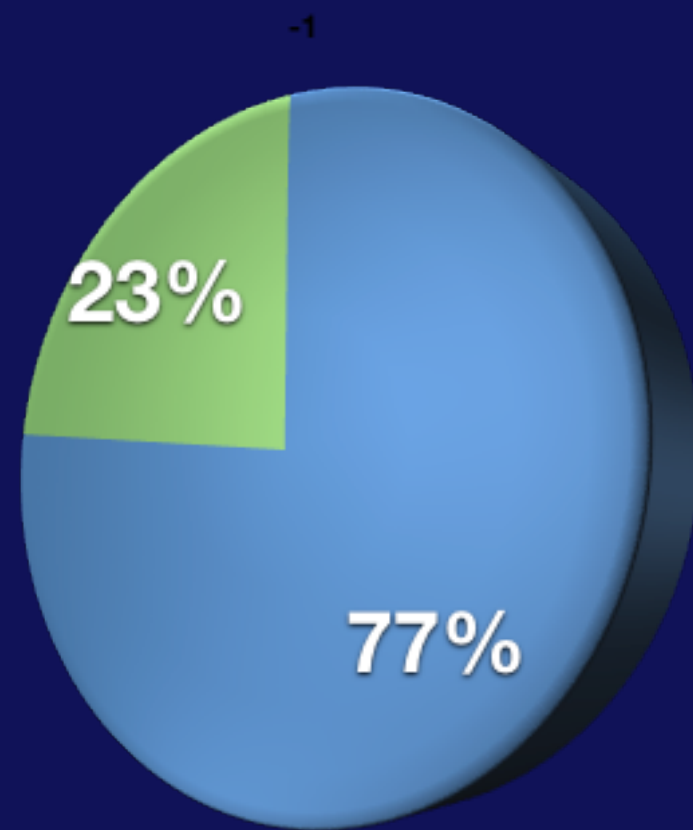
...the bright colours signify data streams - but Africa is excluded...

what is the “digital divide”?

**the discrepancy in availability of digital means
of communication between the developed
countries and the developing world**

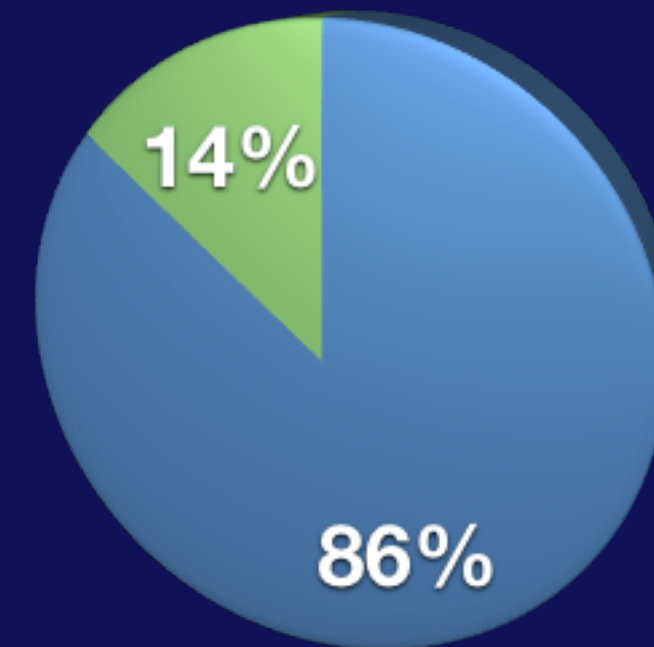
**The “digital divide” includes telephone
communications**

in a pie chart, the African position doesn't even look that bad...



World

● population ● mobile phones



Africa

135 Million mobile telephones are in use in Africa among a total population of the African continent of 850 million. The growth rate is high. That's partly because landlines are scarce - only one in 300 Africans may boast the ownership of a fixed-line telephone. But in comparison, the mobile telephone penetration in some European countries is already around 100%

its evident that (mobile) telephone use brings on enormous economic advantages, but just to bring it home for you once and for all...

- ➔ In some areas, there is no telephone communications at all. A mobile phone is the first phone for many households
- Often, a job interview, a good deal at a local market, or the sale of your livestock is just a phone-call away - if you have a phone
- For example, to have your village included in a safari stop-over plan you will need telephone connectivity
- Some estimates claim a 0.6% gross national income increase for every 10% of phone use

mobile telephone connectivity is facilitated
by multi-national providers - and that takes
a large initial investment on their part



building and
administering base
stations



support and service



90% prepaid in Africa, so
investments in logistics are
required as well

and so, because of the high investents required and the projected low returns, rural areas in Africa are not covered, with no plans to do so in the future

- **Costs for realising infrastructure are high**
- **Everything has to be built from the ground up - absolutely no logistics in place**
- ***But still, 70% of Africans live in rural areas***

this is the situation - mobile telephone connectivity is growing rapidly in Africa, but not outside the cities

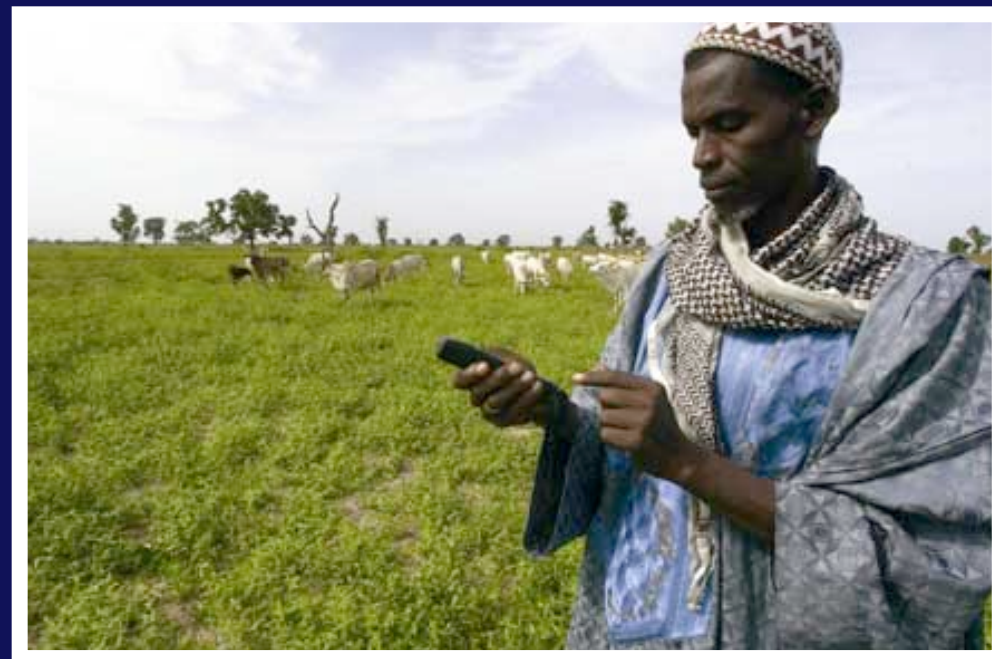
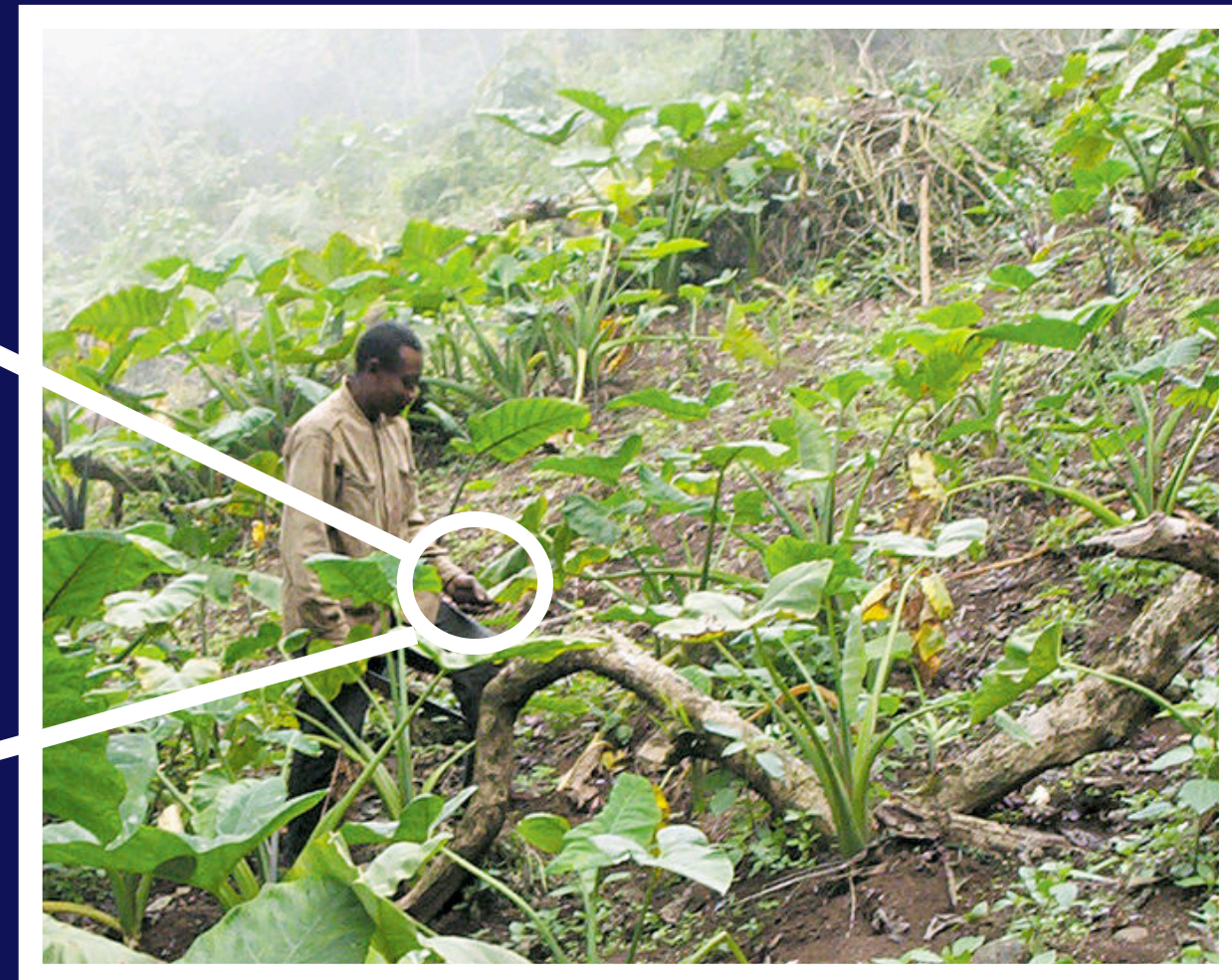


connectivity in and outside Ngaoundéré, Cameroon (source T-mobile roaming map)

MESH will provide connectivity *without a service provider*

- MESH is to make use of peer-to-peer technology
- No expensive infrastructure needed
- Can be implemented using off-the-shelf equipment
- Every handset is also a base station
- A PC with add-on module can act as a transponder
- Which means *free calls* within the MESH

MESH phones find each other automatically



free local calls

... if one of the MESH phones is in reach of a GSM base station, *the whole MESH is connected to the world*



(but then it's no longer free)

..and ... we have the technology...

- **The technology is being developed by TerraNET of Sweden**
- **Ready to be deployed**

How can we help MESH?

by setting up an organisation -

MESH - that can deploy the

technology to the African rural

areas.

what should MESH do?

Set up Pilots

- **Set up phone charging stations** (in conjunction with off-grid sustainable energy suppliers)
- **Deliver MESH - modules** (or MESH handsets)
- **Set up MESH PC's with transponder modules**
- **End-user education, logistics and support**
- **Set up local education, logistics and support systems**

MESH's principle task would be the setting up of pilot programs, and the delivering of support and logistics to these programs once they are running