



Tablet teachers with equipment, Loiyangalani, Kenya. © Petra Dilthey/ethno e-empowerment (eeem.org)

SHOWCASE 3: ethno e-empowerment (eeem.org)

Starting an educational revolution with eBooks for nomadic people in Africa

Interview partners: Dr. Petra Dilthey and Uli Schwarz, Founders, up4change.tv

What is the story behind eeem.org?

The members of pastoralist communities of Northern Kenya have – for various reasons – limited access to the Kenyan educational system. Since their illiteracy rate is high, it makes them dependent on oral transmission of knowledge. The integration of new knowledge into their livelihood strategies can be difficult. However, changes in traditionally known climatic patterns increase the pressure on pastoralist communities to find and implement appropriate adaptation strategies.

Anthropologist Dr. Petra Dilthey and environmental consultant Uli Schwarz produced films since 2010 about the life of pastoralists in Northern Kenya. The attainment of many hours of good video material gave rise to the idea of producing teaching materials in the

form of eBooks that could be understood by illiterate pastoralists. The project was developed outside their regular working jobs: proposals were written, additional material produced and existing material transformed. After two years, they were able to present their first prototype of an eBook based on iOS at the eLearning Africa Conference in Addis Ababa. With the help of a BENGU grant and money from their own foundation, they were able to start a pilot project with ten tablets in the Marsabit county of Kenya.

How does eeem.org work?

Eeem.org is a project of the video production company **up4change.tv**, which documents social change with videos, provides information and background, and

supports social change in developing countries through its own projects. **The mission of eeem.org (ethno e-empowerment) is to bring new educational opportunities with multimedia e-learning programmes to illiterate communities** around the world, while the main target group are marginalized pastoralist communities of the northern parts of Kenya and Uganda.

Eeem.org makes complex topics understandable via eBooks. The eBooks mainly work with videos, graphics and audio messages, all of which were created for the context of Northern Kenyan communities. Since the release of the first eBook, eeem.org produced several eBooks on various topics, some of which are livestock-related: **Grazing Zone** is an eBook supporting basic reading and counting skills, **Animal Health** explains diseases, their symptoms and treatments, **Drought Resilience** explains how to prepare and protect pastoralist livelihoods against droughts and **Livestock Management** aims to introduce sustainable herd management practices.

What is the technology behind the eBooks?

All eeem.org eBooks are based on Apple's iOS, iPads and the software iBooks Author. The project delivers iPads with solar panel chargers to selected educators in the communities. The contents are installed as eBooks in EPUB format and most of the iPads' functionalities (such as web browsers, etc.) are deactivated. The contents are presented interactively, but once installed on a device, the eBook is somehow static. "The update of contents and installation of additional contents is not yet possible remotely because of a lack of internet access", Mrs. Dilthey says. Together with an IT developer and an e-learning specialist, the two founders continually try to improve their teaching materials. Currently, a new GIZ project is planned in Uganda where eBooks will be developed for Windows computers and Android devices.

Take-away messages

According to Petra Dilthey, the key to success is the fact that all video materials were, and still are, produced in close collaboration with the local commu-

nities. This increases the recognition value and acceptance. "It is not understandable that projects still produce old-fashioned manuals and documents. At the end of the day, development organizations should make all contents available in digital format. An eBook is a good tool to reach out to the poorest and marginalized communities. Our project demonstrates that even illiterate and non-technology communities can make use of high technologies, and that these technologies can help to bridge the digital divide". The number of pastoralists in East Africa is

high – which is an indicator for a high potential to scale-up the project. However, it must be kept in mind that the handover of eBooks must be accompanied by awareness raising and training.

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Dr. Petra Dilthey,
Founder, up4change.tv



Samuru tablet teacher Danila teaches in her community.
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