Earth System
Dynamics

Discussions

EGU

# *Interactive comment on* "Climate and resource information as tools for dealing with farmer-pastoralist conflicts in the Sahel" *by* O. Mertz et al.

C. Webersik (Referee)

christian.webersik@uia.no

General comments: The paper is dealing with the role of communication technology for weather forecasting, and its potential in mitigating or increasing the level of conflicts between pastoralists and farmers in the West-African Sahel. The paper addresses relevant questions that fall into the scope of ESD, and more specifically, the special issue of ESD. The paper presents a novel approach in better understanding human-environment interactions, more specifically the role of information on climate variability, weather, and renewable resources may play for conflict resolution. The qualitative methods employed in the paper address the research questions in an adequate way. The overall presentation of the material is well structured and clear, the language is

fluent and precise.

Specific comments: More specifically, there are a few challenges that shall be addressed. In 2.1, the authors argue that seasonal forecasts are not largely used by farmers due to inaccessibility of the information. While this maybe true, it would be good to show a more critical attitude towards seasonal forecasting, questioning whether seasonal forecasts are in fact reliable, especially in the West-African Sahel, where weather stations and recording of weather data are somewhat limited. Hence, it may be advisable to consult the literature on weather forecasting in order to assess the reliability of such data. The reliability aspect of weather forecasting data is also relevant for 3.1, when the authors discuss conflicts between farmers and institutions due to unreliable flooding forecasts.

In 2.4, the authors argue that mobile phones are key in gaining and distributing information. Since smart phones have limited penetration within the population, it seems that "conventional" mobile phones are spreading fast. The authors could be more specific about the use of conventional mobile phones, whether the sharing and accessing of information is mainly voice-based, or whether some information is also accessed via systems that allow the display of web content on conventional mobile phones, such as Opera Mini Mobile Browser or SMS services.

In 3.1, a key aspect of this paper, namely crowd sourcing of weather-related information, deserves more attention. The potential of pastoralists in feeding back information on actual on-site situational data should be explored further. One wonders whether there are examples from other African countries where such crowd-sourcing activities may take place? Given that crowd sourcing is in its infancy for most applications and in the Global North, this maybe not yet the case in relation to weather forecasting.

Technical corrections: Page 4, line 9, delete word "August", and page 9, line 3, author is missing at end of sentence.