

## The Digital Farmer Field School

Loes Witteveen<sup>a</sup>, Rico Lie<sup>b</sup>, Margriet Goris<sup>b</sup>, Verina Ingram<sup>c</sup>

<sup>a</sup> *Development Studies, Van Hall Larenstein University of Applied Sciences, Velp, The Netherlands; Knowledge, Technology and Innovation, Wageningen University & Research, Wageningen, The Netherlands.* [loes.witteveen@hvhl.nl](mailto:loes.witteveen@hvhl.nl); [loes.witteveen@wur.nl](mailto:loes.witteveen@wur.nl)

<sup>b</sup> *Knowledge, Technology and Innovation, Wageningen University & Research, Wageningen, The Netherlands.* [rico.lie@wur.nl](mailto:rico.lie@wur.nl) (corresponding author); [margriet.goris@wur.nl](mailto:margriet.goris@wur.nl)

<sup>c</sup> *Forest and Nature Conservation Policy, Wageningen University & Research, Wageningen, The Netherlands.* [verina.ingram@wur.nl](mailto:verina.ingram@wur.nl)

**Abstract:** This article reports on the development of a prototype Digital Farmer Field School (DFFS) called Kusheh, na minem Fatu, en mi na koko farmer (“Hello, I am Fatu and I am a cocoa farmer”). The DFFS offers a tablet-based substitute for group based certification training for cocoa farmers in Sierra Leone. The design and testing of the DFFS is theoretically grounded in Farmer Field School learning principles of Responsible Innovation and the Digital Technology model. A prototype DFFS was developed and tested in Kenema and Kailahun districts in 2016, shortly after the ending of prohibitions on public meetings due to the Ebola outbreak. This DFFS prototype appears to be culturally and technologically appropriate and fits the operational and strategic communication skills of cocoa farmers and other value chain actors. Farmers were able to operate all the DFFS functions, including accessing data and phoning trainers about cocoa farm issues. The narrative based around a principal character called Fatu—a female cocoa farmer—seems to be a valuable contributory factor in enhancing both male and female farmers’ motivation to use the DFFS. The content and interactive design of the DFFS was appreciated by farmers and their groups. The DFFS, as perceived with the prototype, was considered by the farmers to support them in becoming more autonomous, by repositioning how they learn and increase their professionalism. The DFFS was legitimated as providing promising opportunities for knowledge creation and exchange in a context where farmers have limited direct face-to-face access to certification and farming services.

**Key words:** cocoa certification training, rural service delivery, rural communication, ICT, interface design of information technologies for novice and low literacy users

**Funding:** This work was supported by Wageningen University & Research Science Shop and FairMatch Support in The Netherlands.