

Published on *Marine Ecosystems and Management (MEAM)* (<https://meam.openchannels.org>)

The EBM Toolbox: From Paper to Digital - The Mobile App Revolution in Fisheries

Editor's note: The goal of The EBM Toolbox is to promote awareness of tools for facilitating EBM.

By Ruby Gates

It's 3 a.m. and Ernest Quetel, Jr., and his brother Derek, third generation fishermen from the Caribbean island of St. Thomas, are sorting their catch. With only a few hours left before morning customers arrive, they still have to fill out their catch report - a lengthy paper form required by the Division of Fish and Wildlife for fisheries management. Once a week, Ernest and Derek carve out time to drive over to the east end of the island to deliver their stack of finished reports.

The good news for the Quetel brothers is that, thanks to new software tools, the hassle and inefficiency of the paper reports is disappearing. With emerging technologies such as Digital Deck, eCatch, mFisheries, DeckHand, and iAngler, data can now flow seamlessly from the Quetels' boat after their harvest to fisheries management databases. Aggregated data are delivered to the agencies to inform decision making, and secure proprietary data are provided back to the brothers through their mobile devices.

These mobile apps not only provide a platform for digitizing time-consuming catch reports; they can upload valuable information on species patterns, ocean demographics, and fishermen's behavior. They ensure that all stakeholders from sea to shore have access to information, leading to data being used in new ways. In the Solomon Islands, the Ministry of Fisheries and Marine Resources is using Digital Deck to collect fishery-landing data from vendors in the market so they can begin to evaluate how they will meet their future food security needs. And in Morro Bay, California, the automated reporting system eCatch has been used to create an innovative, shared risk pool system to reduce catch of sensitive species (<http://conservationmagazine.org/2013/09/ecatch/>).

Back in the US Virgin Islands, use of Digital Deck by fishermen like the Quetel brothers has led to increased incorporation of fishermen's perspectives and in-the-field insights into natural resource decision making. Greater use of such technologies will provide a layer of feedback not previously leveraged in the resource management process and help level the playing field between fishermen and resource managers.

- Digital Deck: http://archive.ecotrust.org/marineplanning/downloads/Digital_Deck_factsheet.pdf
- eCatch: www.ecatch.org
- mFisheries: <http://cirp.org.tt/mfisheries>
- Deckhand: <http://deckhandapp.com>
- iAngler: <http://angleraction.org>

[Ruby Gates is CEO of Point 97, which provides tech solutions and engagement strategies for the marine planning sector www.pointnineseven.com.]

Source URL: <https://meam.openchannels.org/news/skimmer-marine-ecosystems-and-management/ebm-toolbox-paper-digital-mobile-app-revolution#comment-0>