

Health Care

Education

Entrepreneurship

Public Safety

Environment



Case Study

Fisher Friend, Bringing Helpful Information to Rural Fishermen

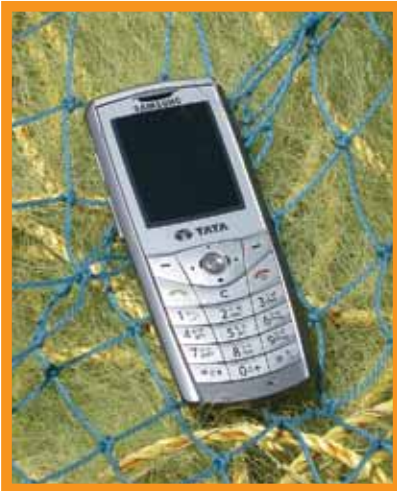
Generations of fishermen in Puducherry, a district in the coastal state of Tamil Nadu in southern India, have practiced and perfected their craft for years. However, with changing environmental conditions and after the 2004 Indian Ocean tsunami and its devastating impact on the local economy, a new generation of fishermen is learning how to use wireless technology to learn 21st century skills and apply them to their trade through a mobile application called Fisher Friend. Participating fishermen and their communities are now using mobile phones with this Brew[®]-based application created by the project partners to earn livelihoods in a safer and more profitable manner.

Challenge

- India is the world's fourth largest fishing nation with fish exports reaching in the billions of dollars annually.
- One-third of the families affected by the 2004 Indian Ocean tsunami were linked to the fishing industry in India.¹
- In 2004, before the tsunami hit, Puducherry's per capita income was Rs 48,000 (US \$995).² Businesses have been rebuilt, however, years later the per capita income is still lower than pre-tsunami levels. In 2008, the Indian government reported Puducherry's per capita income at Rs 41,000 (US \$850).³
- After the tsunami, the World Bank estimated the total loss of income and damages to the Puducherry fishing industry was approximately \$24.6 million.⁴

Solution

- Fisher Friend was created to study the impact of using mobile phones in small fishing villages in Puducherry and Tamil Nadu, as a tool to keep fishermen informed of important safety, weather and livelihood information. This region was chosen specifically to address concerns raised by the local fishermen about their welfare after the 2004 Indian Ocean tsunami.
- Fisher Friend is a Brew[®]-based application offered on a low cost CDMA2000 1x handset with a graphic interface, an icon-based menu and programmable shortcut keys. In addition to safety and weather information, fishermen can receive the locations of fishing areas and real-time market prices with one click, in their local language.
- The flexible nature of the technology platform allows Fisher Friend to be customized through a user-friendly control panel.



Low-cost 3G CDMA handset



Fisherman in Tamil Nadu

- Fisher Friend is commercially available on Tata's CDMA network at an affordable subscriber charge of about Rs 25-30 (or a maximum of US \$0.60)/month.
- In the next phase, to be launched in late 2011, fishermen will benefit from the stand-alone GPS application, which is designed to ensure greater safety and quicker search and rescue in the event of a crisis.

The Technology

- 3G mobile devices utilizing Qualcomm chips
- Wireless connectivity over Tata's CDMA network
- User-friendly Brew-based mobile application

Results

- Fishermen using Fisher Friend have reported that the application made them more efficient, helped them feel safer in the water and improved their daily revenue.
- Devanathan, a fisherman in Puducherry, praised Fisher Friend saying there are days when his catch has gone from averaging Rs 200-300 a day (approximately US \$3 to \$6) to Rs 500-800 a day (approximately US \$10 to \$16).

Partners

- **M.S. Swaminathan Research Foundation (MSSRF)**, a non-profit organization responsible for providing fishing related information being disseminated through the Fisher Friend mobile application. The application leverages MSSRF's relationships and ongoing work with the fishing communities in Tamil Nadu and Puducherry.
 - **Tata Teleservices**, the CDMA2000 network operator; providing free connectivity to 100 mobile handsets.
 - **Astute Systems Technology**, the company that developed and created the Brew® application.
 - **Qualcomm's Wireless Reach™ initiative**, the primary funder for the project; which includes development of the Fisher Friend mobile application and provision of 100 mobile handsets.
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¹ World Bank. "Annex IV: Fisheries." 20 Mar 2005. <http://siteresources.worldbank.org/INDIAEXTN/Resources/295583-1110791780048/annx-fisheries-tsu-na-32005.pdf>

² Ibid.

³ Central Statistical Organisation. "Ranking of States Per Capita Income Wise." Directorate of Economics & Statistics of respective State Governments, and for All-India. 31 Jan 2008. <http://pbplanning.gov.in/pdf/Ranking%20of%20States%20Current.pdf>

⁴ Department of Revenue and Disaster Management. "Disaster Management Action Plan for Floods and Cyclones." Government of Puducherry. 20 Feb 2007. http://statistics.puducherry.gov.in/new%20update/annualreport%202007_2008/socio_economicsANNUAL%20%20%20REPORT%202007.pdf

Qualcomm's Wireless Reach™ Initiative

Qualcomm believes access to 3G and next-generation mobile technologies can improve people's lives. Qualcomm's Wireless Reach initiative is a strategic program that brings wireless technology to underserved communities globally. By working with partners, Wireless Reach invests in projects that foster entrepreneurship, aid in public safety, enhance the delivery of health care, enrich teaching and learning and improve environmental sustainability. For more information, please visit www.qualcomm.com/wirelessreach.