

# III. Environmental Conservation

## Using Mobile Phones to Protect the Environment

Around the world, mobile phones are being used in the environmental arena—from efforts to promote wildlife conservation to environmental advocacy to educating and influencing consumers about the environmental impact of their purchasing decisions.

In the area of conservation, mobile phones are used to track wildlife and provide an early warning system designed to mitigate human/animal conflict. Central to these efforts is improving communication among local stakeholders, non-governmental organizations (NGOs), and government agencies. For conservation efforts to be successful, all stakeholders, including local residents of sensitive areas, must be engaged and their interests taken into consideration. As the case study on wildlife conservation in Kenya shows, opening up communication channels using mobile phones can play a valuable role in community-based conservation efforts.

Mobile technology is also being used to monitor wildlife. One pilot project initiated by Save the Elephants in Kenya employed Global Positioning System/Groupe Spéciale Mobile collars to track elephant movements. Unlike the more expensive satellite/very high frequency tracking systems, mobile communication inexpensively pinpoints the elephant's location and text messages the coordinates back to the researchers. These efforts are in the beginning stages but show great potential for making animal tracking easier and more precise.

The case study on Greenpeace Argentina's efforts to protect forests and pass environmental legislation demonstrates the use of mobile phones in environmental advocacy. Text messages, because they are immediate and direct, offer an effective way to alert constituents about important news and move them to action. If the action is a phone call to a decision maker (e.g., a legislator), mobile communication is especially useful.

There is growing evidence that mobile phones can move people to action more effectively than other media. A number of campaigns reported to us a response rate of 20 to 45 percent for text appeals, which is considerably higher than that recorded for email alerts.

This data is supported by research from the commercial market that shows that text messaging works to influence decision-making and purchasing behavior. Existing research studies reflect that mobile communication can influence how people feel about a product or brand, and affect their behavior. One study concludes: "The reported



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increased likelihood to purchase is the most important finding of this research; on average this was 35%, but it was as high as 71% for one [text message] campaign.”<sup>17</sup>

Given these findings, we sought to investigate some of the text message services that disseminate data on products and companies with the goal of getting consumers to buy or use environmentally sustainable products. While text messaging information lines are proliferating, we have not seen direct evidence that they influence consumer behavior other than by inference based on data from the commercial sector.

Lastly, we looked into using mobile phones as environmental sensing devices, an emerging area that is attracting both commercial and academic interest. Several pilot projects illustrate what may be possible in the future when it comes to applications such as monitoring air quality. Such applications are in the experimental stage and remain relatively expensive for widespread public use.

<sup>17</sup>Rettie, Ruth and Ursula Grandcolas. “Text Message Advertising: Dramatic Effect on Purchase Intentions.” Unpublished paper. Accessed 1 March 2008 at [www.kingston.ac.uk/~ku03468/docs/](http://www.kingston.ac.uk/~ku03468/docs/).