# Linking Poor Farmers into Information Management Systems

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Problem Definition

Getting timely information from farmers in rural development areas e.g. about their farm-performance important for thorough producer-to-consumer supply chain management. Manually gathering relevant data on remote sites by third parties is time consuming, expensive, and risky at times. Therefore providing a mobile online-information-system, where farmers can input and retrieve relevant information themselves, would be highly beneficial. The following challenges have to be tackled:

- Diminish information asymmetry along the supply chain
- Enable rapid information flow and product manipulation
- Deal with connectivity problems in rural areas
- Bridge the gap between humans and technology

Missing Link

Growers
- Farmers
- Associations

Research topics:

A) Handling (Knowledge)

| PDA | Mobile Phones (SMS) |

B) Connectivity

| Internet | GPRS |

Internet

Central IM Database

Information Management Website
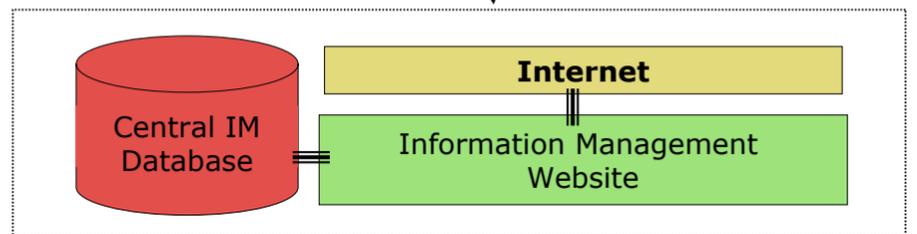
Access To Central System

On-farm data entry in PDA's (Personal Digital Assistant)


Plug PDA into Desktop with Internet connection

Send new data to database, get results and messages of previous data.

Central IM Database
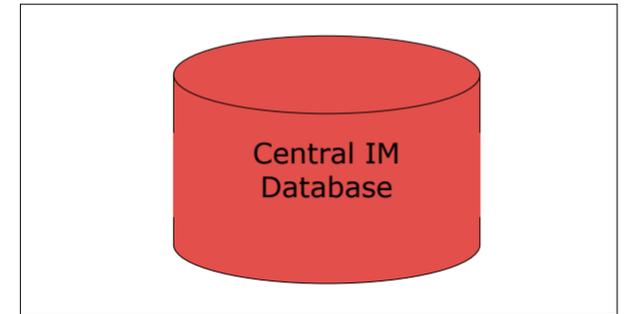
Usability Test Interfaces
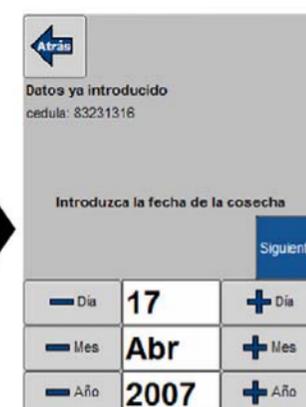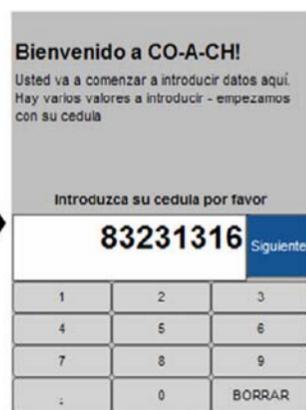
Survey Conclusions

- Farmers prefer full screens to multiple windows
- Custom „virtual keyboard" for text input worked well
- Use of fingernails/fingertips instead of stylus
- Prefer text-buttons or combinated text-image buttons over simple arrows
- Support input with „beep"

- Farmers prefer digital devices (PDAs) over manually collecting data
- Interface is easy to use, but more thorough explanation necessary for complete novices
- Source of most problems is nervousness
- Participants' children always understood concept and controls straight away
- The use of the fingernail as stylo should be preferred, but with finger-input optimised PDAs
- The project application has to be the only one running on the PDA, all hardware buttons have to be deactivated