



Innovative Farmer Advisory Services using ICTs

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Forum for Agricultural Research in Africa

Ghana



- The past 10 years have seen remarkable progress in the use of information and communication technology (ICT) in African agriculture, especially for facilitating farmers' access to market information.
- The Forum for Agricultural Research in Africa (FARA) analyzed 60 farmer advisory services in Africa that are currently being designed, currently operating or recently terminated.
- The countries which are represented are Benin; Burkina Faso; Cameroon; Egypt; Ethiopia; Ghana; Kenya; Malawi; Mali; Niger; Nigeria; Senegal; South Africa; Tanzania; Uganda; Zambia; Zimbabwe and 10 projects operating in more than 3 countries.



The projects have been divided into four categories:

1. VOICE INFORMATION DELIVERY SERVICES
2. RADIO: DIAL-UP (AGRICULTURAL INFORMATION ON DEMAND) AND REGULAR RADIO BROADCASTS
3. EXTENSION SERVICES BASED ON MOBILE PHONE AND DATABASE MONITORING
4. E-LEARNING FOR BASIC SKILLS, AGRICULTURAL EDUCATION AND VIDEO-BASED APPROACHES



Major Outcomes/Results (1)

Figure 1: Duration of the Projects

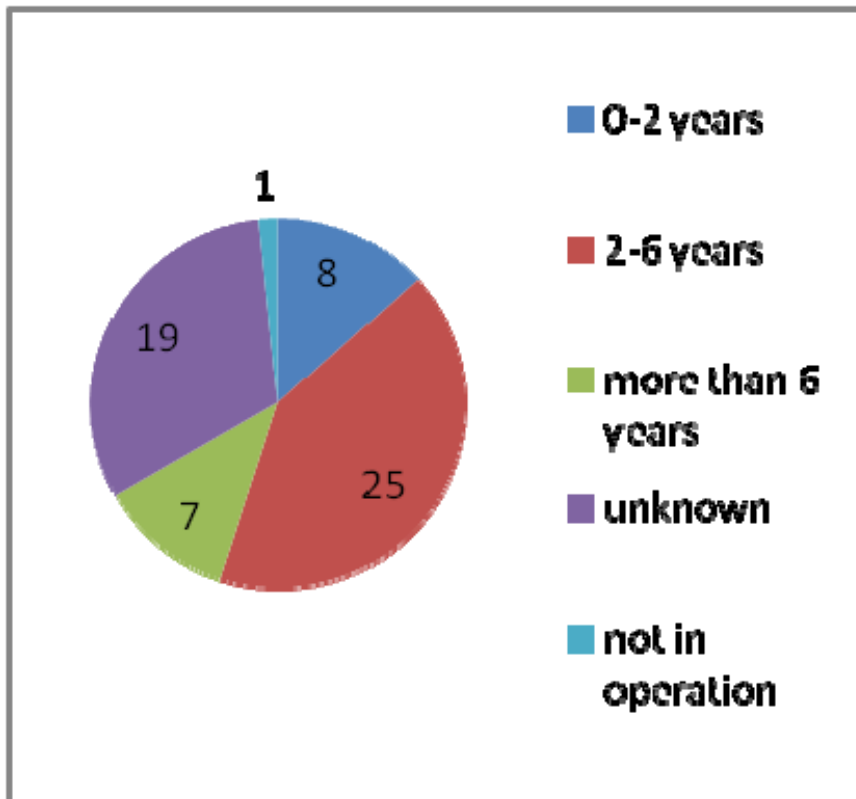
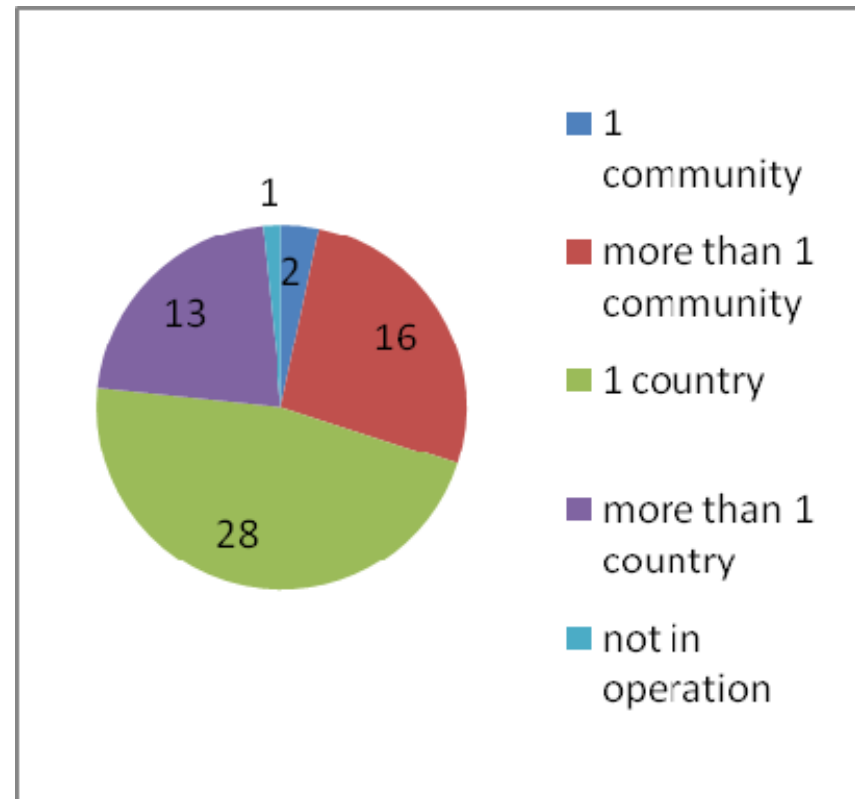


Figure 2: Scale of the Projects



Major Outcomes/Results (2)

Technology Used	Number of Projects
Internet	47
Radio	17
Television	2
CD-Rom/video/DVD	6
Mobile phone	22
IVR	4
SMS	16
Telephone (call-in)	4
Dial-Up Radio	1
GIS	1



Major Outcomes/Results (3)

Type of Organization	Project Implementer	Project Partner/Funder
International Organization	11	39
Local/National NGO	25	6
Government Department/Agency	9	6
National Agricultural Research Centre	4	3
Private Company	3	10



Benefits

- Provides high number of useful resources

Web-based solutions

- Can provide pictorial illustrations
- Can provide lengthy, detailed explanations

SMS

- Can be Customised for language
- Cell phone use rapidly expanding throughout the continent



**Zambian National Farmers'
Union SMS Service, IFAD**

Costs

- Requires a basic level of literacy

Web-based solutions

- Entails ploughing through many publications
- Often unreliable internet connectivity
- Limited access to and ability to use computers among many rural populations
- Often not updated regularly

SMS

- Contains only a small amount of information

Benefits

- Can be easily customised for language
- Readily accessible and easy to use

IVR

- Can provide ready researched and prepared answers for commonly asked questions

Video-based solutions

- Can provide demonstrations

Call Centres

- Can receive feedback from professionals immediately

Allo Ingenier Call Centre, Cameroon



Costs

IVR

- Costly to develop
- Complicated: requires machines to produce good speech synthesis
- Often does not provide detailed info such as pictorial illustrations

Video-based solutions

- Costly to produce
- Many lack the equipment to view the info

Call Centres

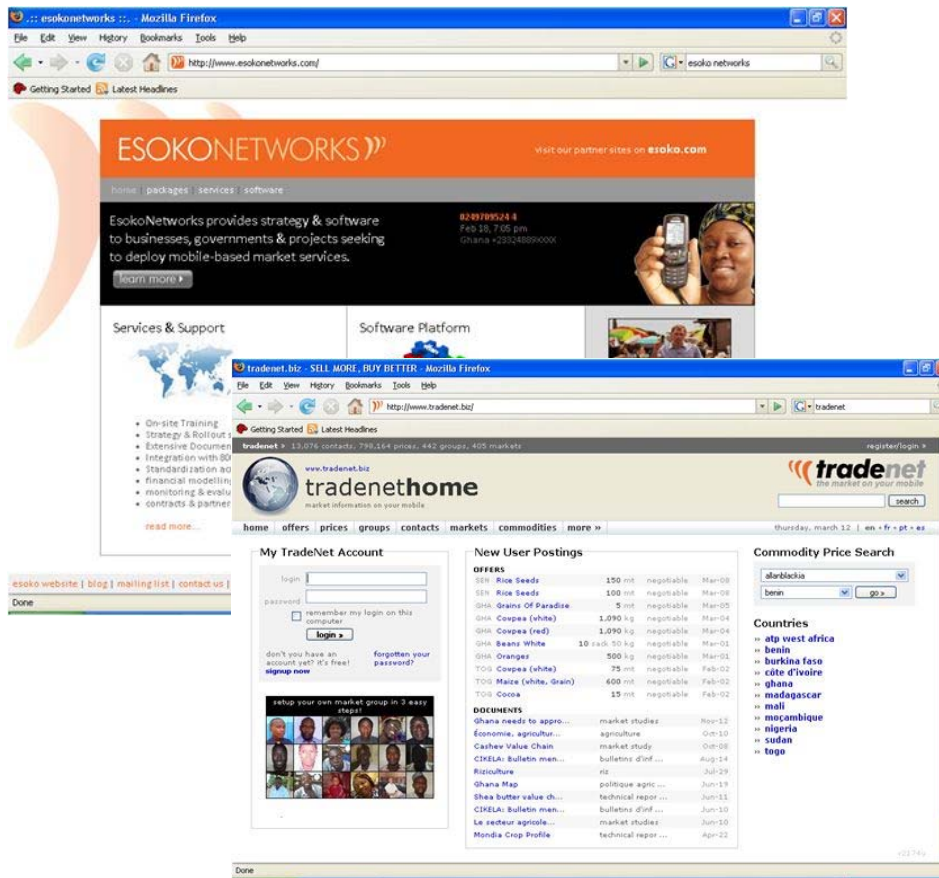
- Call congestion
- Often requires follow-up if info is not currently available





Esoko (Tradenet)

- Any individual, business or producers group can set up on Esoko
- Works with web and mobile devices
- Operating in 10 countries
- Offers 4 main services
 - *Live market feeds using SMS*
 - *Direct SMS marketing*
 - *Scout polling*
 - *Online profiling and marketing*

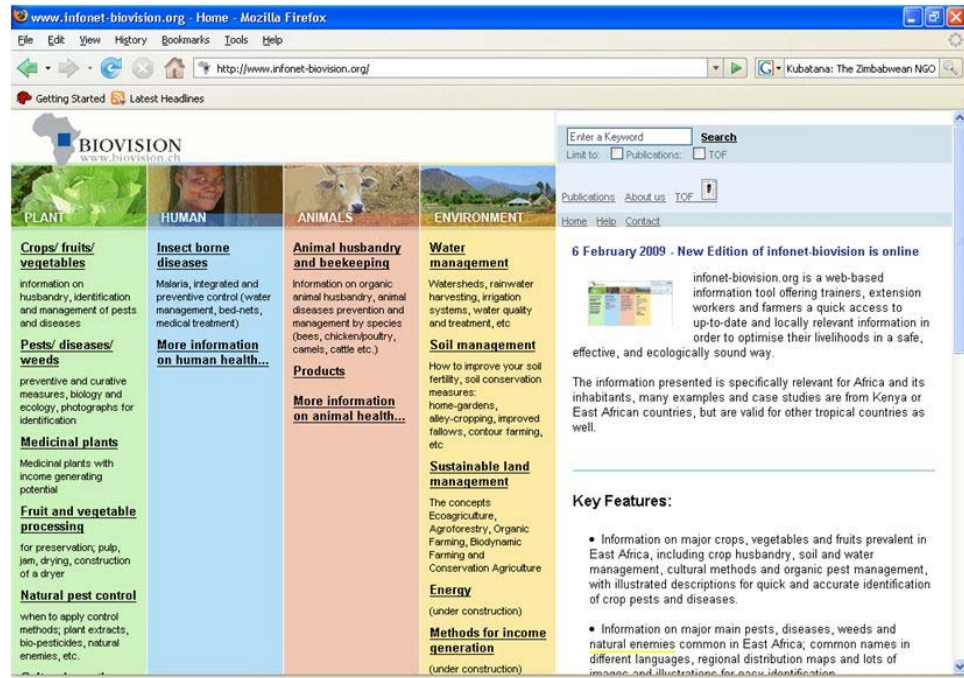




Infonet-Biovision

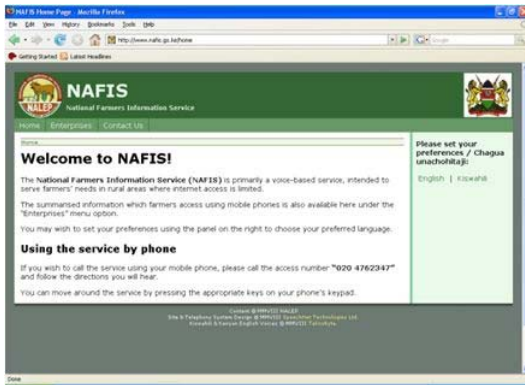


- Developed by the Swiss Biovision Foundation
- Web-based service promoting organic farming
- Attempts to overcome constraints of written work through pictorial illustrations
- Rollover function is implemented on the pictures so information pops up when the cursor is moved over a photo





Freedom Fone



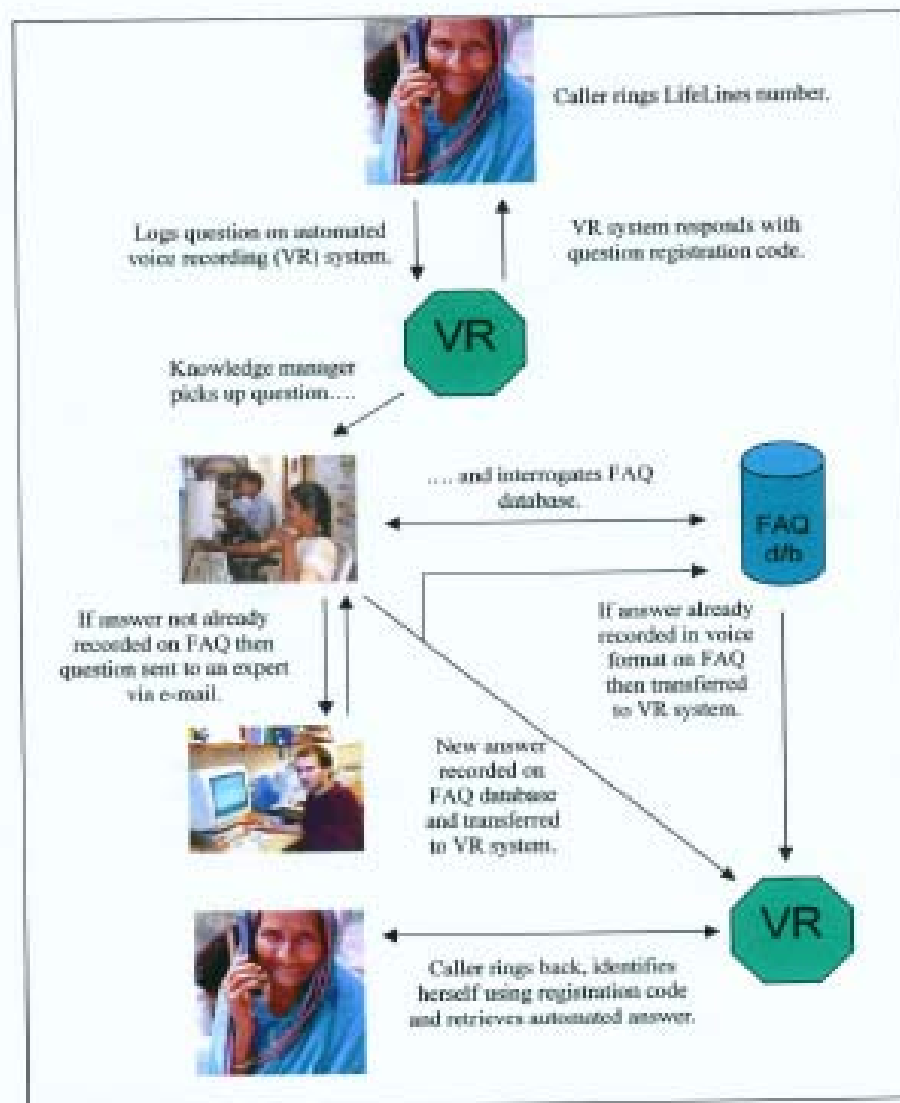
National Farmers Information Service (NAFIS)

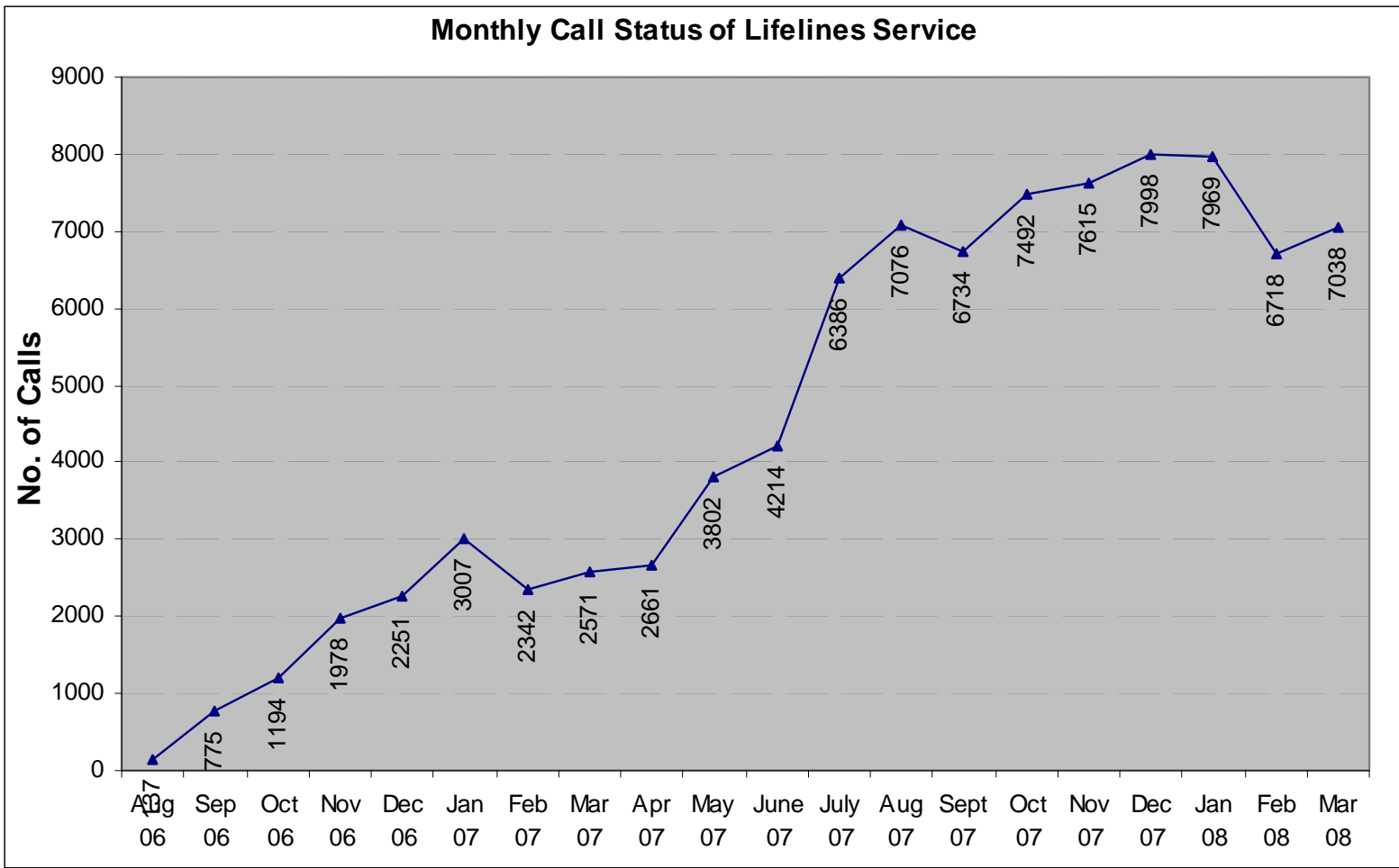
Collecting and Exchange of Local Agricultural Content (CELAC -



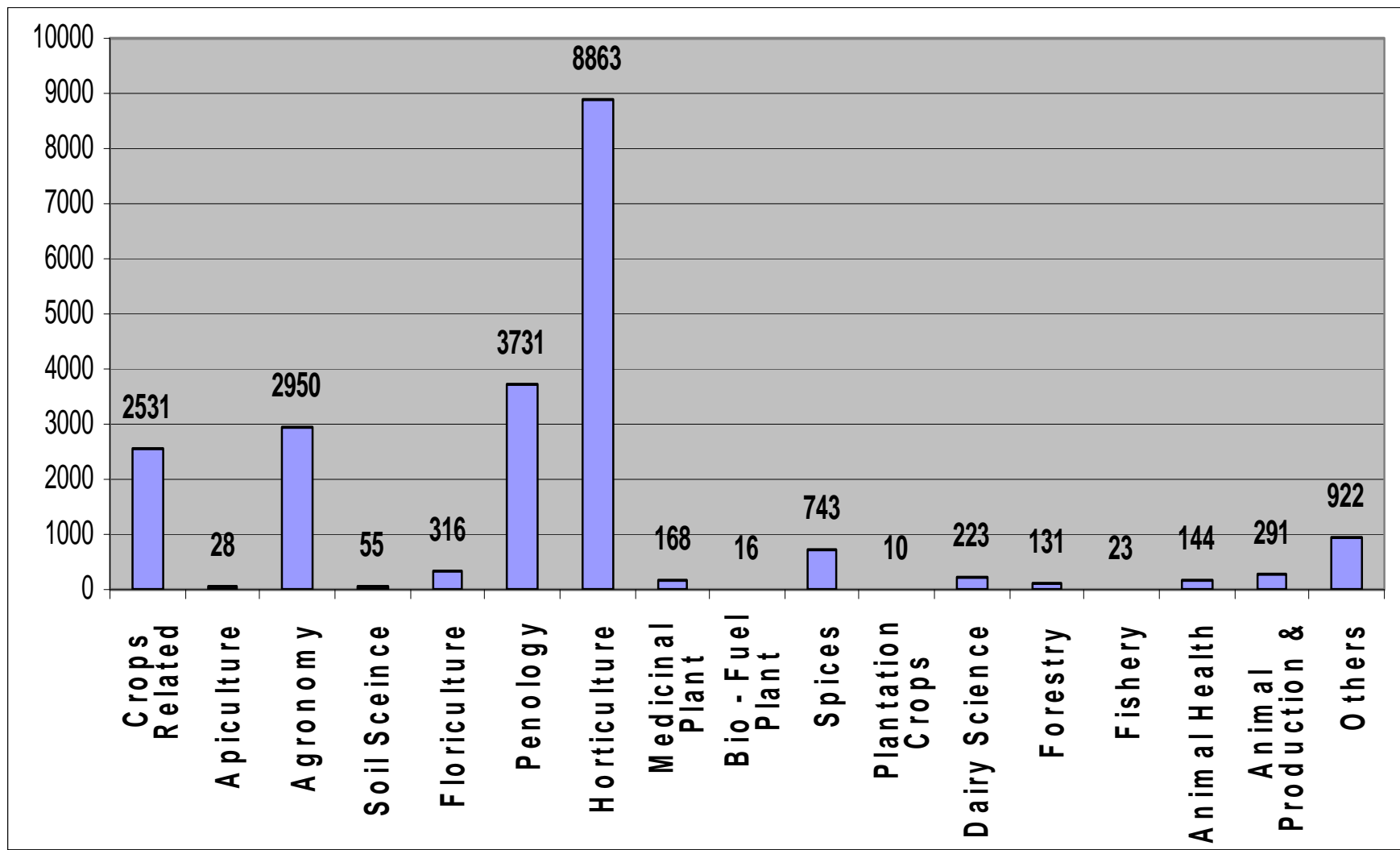
ANNEX A: HOW LIFELINES MIGHT WORK

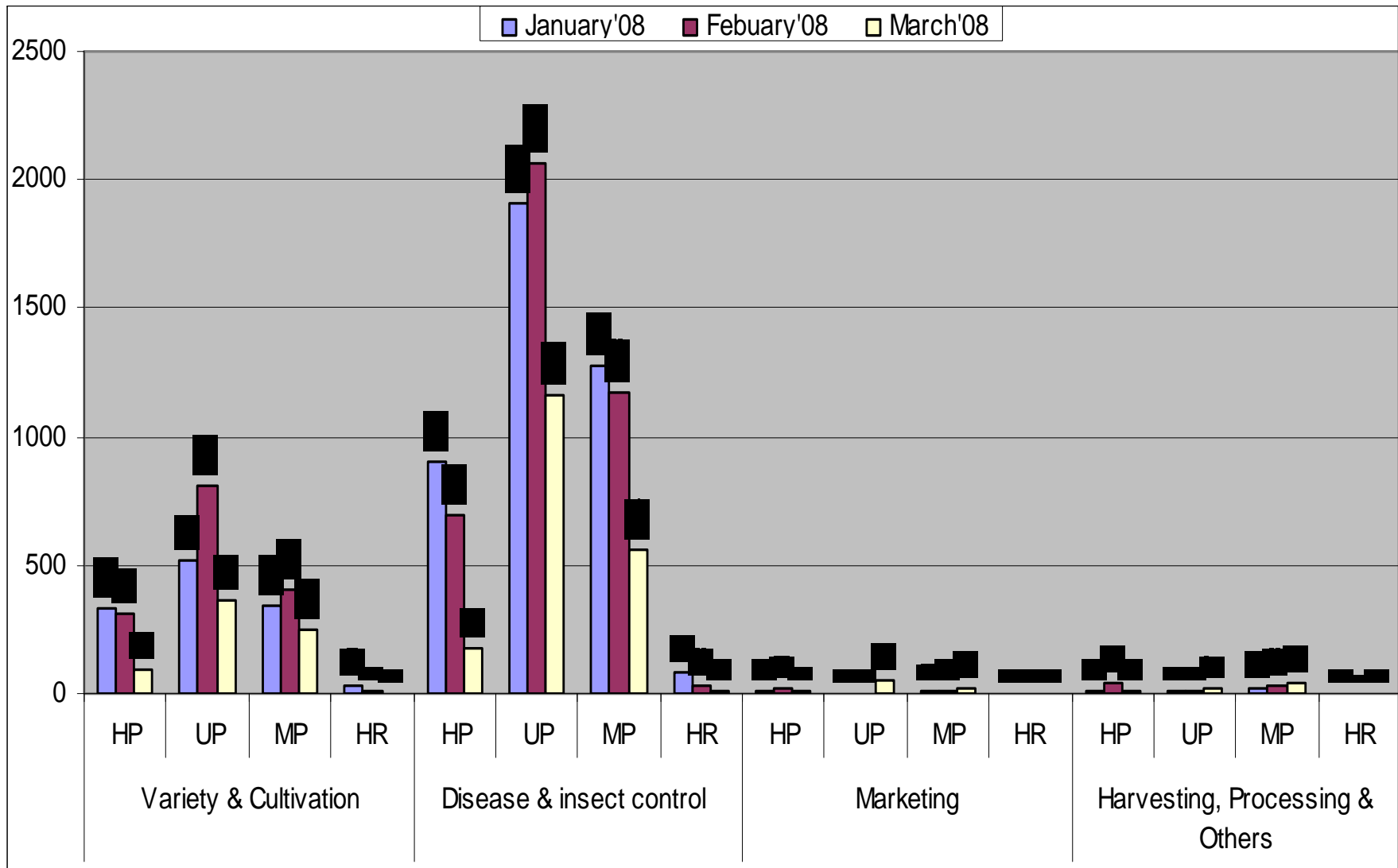
Note: these are very much initial outline ideas that will be refined and developed during phase 1 of the project, which will involve appropriate pilots and trials.





Types of Queries Received: Jan'08 – Mar'08





Video solutions: futuristic mobile?

Africa Rice Centre (WARDA): Enhanced rural learning systems developed according to ZIZO approach :



Land preparation and water management



Rice seed bed preparation



Rice transplanting



Rice weed management



Barriers to Up-scaling

- Difficult to attract the private sector to invest
- Difficult to address local needs
- Difficult to develop appropriate info dissemination technology for each context
- Difficult to gain consensus about the content from the many competing stakeholder interests
- New projects influenced by availability/functioning of input supply, credit systems, land-tenure arrangements, organization of marketing, distribution of benefits, etc



- Create different platforms to respond to different information needs
- Develop a model to implement farmers' feedback
- Reconcile servicing the community (for free) and sustainable business model (for profit)
- Create Public Private Partnerships (eg. mobile phone operators)
- Public sector should focus on content creation and repackaging
- Private sector to focus on technological upgrades
- Civil society to develop active utilizers constituency and community knowledge management, rather than direct interventions and implementations



