SYSMAS
a handy software to manage by SMS &
Web Interface notifications on HWC &
other wildlife events…

Prepared for the 8th International Congress for Wildlife
and Livelihood on Private and Communal Lands

Sébastien Le Bel & David Chavernac

Human Wildlife Conflicts
Social Crisis & R&D Challenge?

What’s happening?
Killing?
Removing?
Chasing?
Laissez-
faire?

From Historical Stories…

To Urban Problem!!

Human Wildlife Conflicts
Social Crisis & R&D Challenge?

SysM@S
easy data system management - V.dev

Its Importance in Sub Saharan Africa

- Number species involved (up to 34)
- Economical - social impact (hostile value)
- Ecological cost (revenge killing)
- Increasing phenomena (Central, Eastern &
Southern Africa)
Hopeless situation?

- On-going problem
- Negative impact
- Local specificities
- Human perception rather than facts

Decreasing the negative impact of HWC
Increasing the tolerance of local communities

HWC Mitigation Strategy

- Controlling problem animal
- Prevention based on a better understanding
- Reporting HWC incidents

Magnitude HWC

Social carrying capacity

Time

Poor information system undermining any HWC mitigation strategy

Cell Phone Mania

- Cell Phone: a booming sector in SSA
  - 454 millions connections,
  - > 700 millions in 2016,
  - More than a communication channel.

- MDCS (Mobile Data Collection System)
  - Active development & user communities,
  - Technical complexity & ease of setup,
  - Appropriateness for rapid assessments.

- FrontlineSMS
  - Open source,
  - Widely utilized by NGOs,
  - Managing SMS with GSM network.

The NOMAD (Humanitarian Operations Mobile Acquisition of Data) (Chris Jung 2011)
translated with HWC cards... in an A4 HWC form with 32 variables...

Any WC incident... 2G - GSM network (1) HWC SMS send to...

(2) the HWC Data Base...

(3) Alerting Decision Makers

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To start with Keyword + space >> informing the computer (auto-reply & forward message).

Recording NO information
To separate each information by a comma.

CHU 4/20/3/2011 nig, Chir, 22, Dumela, 6W, 7W, hom, Blessing, hye, 2, sad, 0, 14w, 15w, 0, 17w, 18w, 19w, 20w, 21w, 22w, 23w, 24w, 25w, goa, 3, tom, adu, ho, m, fam, monit

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Limits

- Suspicious of hunters to send information about their activity.
- Typing mistakes/errors pushed for the use of PDA (on-line record).
- IT hiccups: SMS been cut in pieces (53% error).

Further Development

- Full Scale Testing in Zimbabwe (Dreams EU Project)
  - HWC early warning network.
  - Epidemiological surveillance system.
- Geo-referencing ground information
  - Manually with reference grids.
  - GPS.
- Connected with Geographic Information Systems (GIS)
  - Thematic maps for decision makers.
- Automatic generation of preliminary reports
- Off-line utilization with transfer of data when Internet connection is available.
Thanks for your attention!!

Acknowledgement
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More information?? Send me an SMS or an E-mail
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