

## How to...produce farmer-friendly sms and text messages for extension campaigns

ASHC has developed a checklist for the production of down-to-earth printed sms texts for smallholders.

Text messages should be:

**Timely** – there are two sorts of timely information for smallholders.

- Information that relates to the farming cycle.
- SMS and text messages help to alert farmers to crises or changing information and can give advice on what to do. Dynamic information can include problems like an armyworm outbreak in the locality, short or long-range weather information, market prices of input (seed and fertilizer), or crop output prices.

**Advice backed by evidence** – preferably farm-level trials rather than just evidence from research stations but including farmer-led innovations and indigenous knowledge as appropriate.

The ethical position for any extension information has to be that it can do no harm and should be capable of offering real help to smallholders. In this context that means not extending the level of risk smallholders are exposed to.

**Be actionable** – SMS messages need to offer suggestions and solutions – not just offer information (with the possible exception of price). Defining the problem is not enough – wherever possible the farmer should apply their own judgment.

**One message** – each SMS should usually concentrate on one key message, unless it is a summary of a number of previous SMSs used to consolidate understanding and present affordable options.

**Offer options** – within the ISFM approach there are often options. So a good SMS/ text message campaign will try to set out principles of ISFM and suggest options – without being too prescriptive.

Farmer's should be encouraged to apply their own-judgment.

If the campaign is for resource constrained women farmers – then options that reflect the choices open to them should be prioritized – so very low input options.

**Options must be compliant with existing rules and regulations**

**Be clear** – presenting ISFM options has to be done in a way that is clear and easy to understand. This should usually involve a testing stage for all ISFM messages. Quality assurance is an essential part of the campaign to ensure the information is clear and accurate.

**Be relevant and not patronizing** – smallholders may need some familiar information included in texts to validate the more innovative messages. But sms/ texts messages that include things that are obvious to all smallholders should be avoided. This is a judgment call for the editors but it is essential that the assumed knowledge behind a campaign is tested.

**The right language** – SMS are by their nature simple messages with a maximum of 160 characters. So short, simple words and short sentences are a must. The right language includes ensuring that farmers' terms (not scientists' ones) are used. There is a further decision that needs to be tested: should the materials be offered in local languages or the main language of the country? In Ghana it was decided that written text should usually be in English. This was because:

- People who could read, read English
- The written forms of local languages were not precise enough for some of the complexities of the ISFM message; for example distinguishing fertilizer, manure and compost

If the campaign is being developed for a specific group – e.g. young people – then make sure that you are exploiting the way that young people use sms: this includes emoticons and abbreviations they will understand. Some latitude with conventional punctuation is probably acceptable – if the meaning is clear.

Spoken word generated dial-out phone messages can be easily developed in local languages where this technology is an option.

You only have 160 characters (in the case of Tweets 140), so make sure they all work really hard. Remember a space is a character.

**Be realistic** – are the ISFM technologies on offer possible for smallholder farmers to replicate, given their limited resources and the other challenges they face. This would include:

- Ensuring units of measurement are presented in ways that can be replicated with a minimum of equipment
- Ensuring that inputs are described in a way that is clear to farmers

- Ensuring that inputs are available; for example single nutrient fertilizers may be the best way to address soil fertility, but if agro dealers only stock blended fertilizers it doesn't help.

**Localized information** – depending on how the database of farmers' sms details has been built depends on how customized materials can be; for example options of crop varieties can be pre-selected based on what works in that locality (and what is available).

It is important to know the level of localization that can be used to select recipients for different messages for example to link smallholders to input dealers with a particular variety of improved seed. This is easy to do as a response to a query – but may not be possible as part of a text out campaign.

**Customized crop specific information** – again depending on how the farmers' details have been collected, smallholders should be able to select sms messages relating to crops that are important to them.

**Feedback options** – where possible feedback options should be developed. This could include links to input suppliers/prices or market prices in different localities. It could include a plant doctor type of service.

**Signpost to other sources of information** – using short URL codes can mean that website for further information can be included in an SMS.

**Manage expectations** – plan the text campaign. Try to make smallholders aware that further messages are going to be coming in relation to this subject i.e. +4, (i.e 1 of 5 messages in a set)+3, +2, +1, 0 showing the countdown at the end of the message.

Overall the campaign needs to solve real problems or present real opportunities to smallholders. The information offered also needs to be regularly updated.

### **Maize mono-crop in Ghana (draft sms campaign for Northern Ghana)**

This 20 x sms/text messages campaign has different options for one of the messages depending on whether it is the minor season or major season. The messages utilize most of the available 160 characters to try to share clear messages about what smallholders should be doing. These messages were developed for a specific area and will need substantial adaptation for other areas. ASHC can help customize your messages to the needs of different smallholders, crops and locations.

1	Follow these 20 SMS tips & grow more maize! You need light well-drained soil, at least as deep your foot (30cm) shallow soil? Try upland rice, cowpea & cassava!	<b>160 characters</b>
2	Clear dense vegetation with herbicide/slash. Burn only branches thicker than a finger. Burning kills helpful organisms & makes soil blow/wash away – add manure	<b>159 characters</b>
3	Maize needs lots of water-raised earth bunds, trenches or applying mulch (slashed vegetation) keep rainwater in soil - when water runs-off so do soil nutrients	<b>160 characters</b>
4a	<b>Minor season</b> –choose a fast maturing, drought-resistant variety. Mamaba’s high yielding, quality protein maize - short stover. Obatampa’s better in major season	<b>160 characters</b>
4b	<b>Major season</b> - choose a high yielding quality protein maize with long stover such as Obatampa. Mamaba’s maize seed is better in the minor season	<b>145 characters</b>
5	Maize planted in rows is easier to weed & apply fertilizer. Make rows 2 cutlass blades apart & planting holes 1 cutlass blade apart in row. Plant 2 seeds/hole	<b>158 characters</b>
6	Seed test: arrange 100 seeds on a wet towel on a plate add water daily. If less than 60 germinate after 10 days increase seeds/hole to 4 – but thin to 2 plants	<b>159 characters</b>
7	2 plants per hole is ideal-Either plant 3 seeds/hole & thin to 2.OR plant 2 seeds per hole & gap fill soon after the plants emerge. 3 seeds/hole = skinny maize	<b>159 Characters</b>
8	Micro-dosing: small amounts of NPK fertilizer applied at planting time ensures NPK is in place as maize seed needs it to grow. Fertilizer mustn’t touch the seed	<b>160 characters</b>
9	NPK fertilizer improves a maize harvest. At planting, apply 50Kg (GH40) get 10 bags/acre, or 100Kg (GH80) get 25-28 bags-Fertilizer mustn’t touch the seed	<b>154 characters</b>
10	When preparing the plot for planting – make 2 holes – a thumb length apart. 2/3 maize seeds in 1 hole & 1 heaped Fanta top of NPK in other	<b>139 characters</b>
11	2 weeks after planting weed using a cutlass. Do not use herbicide at this stage as it may damage the young plants. Also thin the seedlings to 2 plants per hole!	<b>160 characters</b>
12	If you didn’t microdose at planting – top-dress a heaped Fanta top of NPK/plant a thumbs length (5cm) from the maize plant. Poultry manure can be used instead	<b>159 characters</b>
13	6 weeks after planting remove the weeds by hand or use a herbicide (Round-up) - requires 1 litre/acre. Weeds compete with the maize for nutrients in the soil	<b>157 characters</b>
14	Option 1:after 6 weeks -make a small hole a thumbs length from the maize plants. Add 1 heaped Fanta top of urea to hole & cover immediately (Option 2 follows)	<b>160 characters</b>
15	Option 2: after 6 weeks apply a level Fanta bottle top of ammonia as a top dressing	<b>84 characters</b>

<b>16</b>	Harvest when maize as soon as it's matured (look for the black eye). Late harvest means termites, rodents & birds take 3 cobs in 10!	<b>135 characters</b>
<b>17</b>	Husk maize cobs in the field to avoid transporting weevils from the field to the cribs. The husks will improve the organic matter in the soil	<b>141 characters</b>
<b>18</b>	Dry maize in cribs for aeration & faster drying. Crib should be an arms length wide, as tall as you & as long as necessary. Maize dries better in a narrow crib	<b>160 character</b>
<b>19</b>	Don't spray insecticide of maize for storage should rather use superactellic during storage – the insecticide will not touch the maize & is safer.	<b>146 characters</b>
<b>20</b>	Return as much organic matter as possible back to the field: manure, crop residues, weeds, compost all help. Fertilizer works better when organic matter is added	<b>160 characters</b>