UNIT 7 - Reporting Agrometeorological bulletins - Draft prepared by SDRN/FAO

Here are some notes about what makes a “good” agrometeorological bulletin. If you have some contrasting views, or if you would like to add/comment, please do so! Examples of good and useful contents are particularly welcome!

1. Philosophy

A bulletin is issued for a user community. It must be tuned to the requirements of that community, which also implies that the users are known. It is good practice if a bulletin is prepared jointly between national agrometeorological services, agricultural extension, maybe agronomic research, agricultural statistics when relevant, etc.

2. Frequency

The regular publication of the bulletin is essential. Ideally, an AB should be published every week or every ten days, and the delay after the end of the period that is covered should not exceed 2 days. In the case of monthly bulletins, they should be issued no more than 5 days after the reporting period.

A good approach is to publish detailed monthly bulletins, with more frequent “updates” in between, for instance every week.

3. Presentation

The presentation is, of course, a very subjective element, with marked cultural aspects. The suggestion is that too much colour and fancy lettering (particularly “green shaded blue and yellow bold underlined italics”!) distracts from the main focus of the bulletin. Use colour for the title and header, and use black and white for all other lettering, including tables. Colour maps and graphs, on the other hand, are much more legible than the same information presented in black and white or shades of grey.

4. Contents

   a. Summary

The Bulletin will have a one-page summary. Most people will not read beyond the summary. It is important that the summary should not exceed one page, including the header and title mentioned above. The summary will have two components: a box with text, and a map of the country showing areas where problems occurred or are likely to occur.
It is good practice to write up the summary in a very synthetic way. For instance, refer to regions (the “central part of the country”, or “the northern maize growing areas”. Avoid, unless absolutely necessary, to refer to station data, and do not mention any “numbers” (1765 Kg of wheat per hectare, or 123.6 millimetres of rain!). Instead, use qualitative paraphrases (below-average yield, very intense rainfall).

Do remember, in general, and in the summary, that agriculture is not just cereals. It is also roots and tubers, bananas, fruits, animals, rangel and, plantations, cash crops, inland fisheries and several other sectors that may be important in terms of economics or livelihoods in the country.

b. Weather analysis

The weather analysis will have a short section summarizing the farming weather up to the reporting period, but more detail will be provided for the period being reported on. The tradition is also to compare the current reporting period with the long-term average and the previous season, which is usually fresh to the mind of people.

The information is usually presented in table and in map form. Maps do strike users, but they are less precise than tables. Therefore, some countries use a lot tables in their long-term analyses, for instance the weather up to the reporting period, but use maps for the reporting period.

The weather analysis now also often includes some satellite information such as NDVI or cloud durations. This is not, strictly speaking, “weather”, but the mentioned indicators provide good qualitative clues about the development of the season.

Good indicators often become “good” not because of their intrinsic value, but because they have been used consistently for many years, so that the readers of the bulletin develop a perception for what they mean in terms of impacts. A very good example is the Palmer Drought Index used by the US Department of Agriculture.

In general, avoid too technical jargon (e.g. “heliophany“, degrees Kelvin, etc; if necessary, include a glossary). Don’t forget that may people cannot easily read graphs.

c. Agricultural information

This point is different from the next one, which covers weather impact analysis. The information that is listed here is a “snapshot” of agriculture that is needed to understand the impact of weather. For instance, heavy rainfall and wind (and their combination in cyclones) can have a very different impact if it happens just after planting (when crops tend to be less fragile) or at harvest time!

This is mostly qualitative information about crops, livestock, pests and diseases. It includes crop stages, the development stages of pests, estimated soil moisture. A number of useful maps can be included to cover such things as crop stage, the time left to harvest, the current areas of high cattle densities in pastoral economies, sometimes information on crop prices if available, the amounts of fertiliser used by crops, the condition of rural roads during harvest, etc.
d. Crop condition: the impact analysis

This section is the core of the bulletin. It describes how weather (section b) has affected agriculture (section c). The contents of this section and the next (e) are the substance of the summary. Yield maps, if available, belong here. The accent is on the mechanisms. Some examples follow:

- lack of rainfall at the time of flowering of maize is likely to reduce yields
- unusually high temperatures at the time of flowering of rice will probably negatively affect pollination
- the combined effect of high moisture and low temperature has certainly favoured the development of black spot disease
- abundant rain in the northern region has created good breeding grounds for desert locusts but rangeland production has improved.

e. Prospects

Prospects describe what will happen between now and harvest given the situation described in (e) and considering what we know about the future. This may be based on climatology (“normal weather”), weather forecasts or seasonal forecasts, plus information on roads, market conditions, health of people insofar as it affect farming operations, etc.

f. Back-cover

The back-cover is an often overlooked part of a bulletin. This is where glossaries or generic information can be accommodated. It is very bad practice to put this “technical” information at the beginning of the bulletin: some bulletins have a most annoying introduction explaining the difference between relative and absolute moisture, or the sitting of weather stations!

The back-cover can have interesting reference information, for instance a map showing the main agroecological zones of the country, or explain what crop are “native” and which one are “exotic”, or some advice about how cassava cuttings can be sterilised before plantings, etc. The back cover should be changed in every bulletin. If the information is interesting, people will collect the bulletin!