Dear Colleagues,

Thank you inviting us to contribute to this online consultation on Voluntary Guidelines for Sustainable Soil Management. This draft is a very good first stone to build upon a better soil management.

• Does the zero draft sufficiently outline a way to achieve sustainable soil management worldwide?

I appreciated the step by step construction of the document. Technical aspects (i.e. management practices) are present (see below), however communication, outreach advocacy ect.. are uncovered : 3 lines in section 5, with only mention of GSP, while GSP is not the only actor there.

• Have all the key technical elements to achieve sustainable soil management been included in the guidelines?

No.

1- Most of the document focuses on agricultural soils : more should be devoted to pasture and forest soils, as well as organic soils, rangeland, and even urban soils. For example in P 5 “Given the global diversity of soils and of agricultural management practices there are many pathways to achieving sustainable soil management”. Forest management practices are also relevant here.

2- Regarding agricultural practices, nearly all the attention is given to conservation agriculture / no tillage, while there are technical actions which are not mentioned or paid enough attention. Conservation agriculture is recommended without any caution (recommendation for reducing or suppressing herbides use for example…). Practices such as agroforestry or cover crops and infrastructures such as hedges are nearly absent from the document. E.g add hedges it in p 17 bullet point 8 as measures at the landscape scale to combat erosion, increase SOC and promote biodiversity. Organic agriculture is absent from the document: much can be said/discussed about the potential of organic agriculture to sustain food security, but it is curious that it is absent. It is, at least, a form of agriculture that reduces pesticides inputs to soils, promotes N fixation and organic fertilization and seeks to increase the organic C content of soil. The use of legumes to fix N is not very present in the document either (e.g. add it p 17 bullet point 4 about nutrients).

3- More precisely, concerning soils organic matter, it often appears under the umbrella of soil cover, but if this is one of the most efficient ways to increase SOC contents, it is not the only one (e.g. agroforestry, e.g. organic wastes from cities). Soil organic matter is absent from the guidelines to control soil erosion (p12 3.2) (increasing soil organic matter content increases aggregate stability and hence decreases soil erodibility).

4- There is no mention of techniques to restore severely degraded soils.

• Do the guidelines take into account the great variety of ecosystem services provided by soils?

Yes in general, although it is present in the first part of the document and little thereafter. I propose to use the term multifunctionality : soils would be better managed if all users were aware that they are multifunctional (provide multiple services).

• Will the results of the guidelines, once implemented be sufficient enough to achieve the Sustainable Development Goals (SDGs)?

These will be a good start.. There is little development on the need of policies at the landscape, territory scales to avoid deforestation, agricultural land take for urbanization. Quantitative or qualitative criteria for judging of point 3.6 (p 14) will be needed.

• Do the guidelines identify activities that should be avoided to achieve multiple benefits through sustainable soil management?

Not really, the document is not build to identify them clearly. One topic that is not clear enough and sufficiently covered enough for me is that dealing with contaminants.