

## **Recommendations for agriculture - CRF**

### **General**

#### Shadings:

- Reporting of values in shaded cells should be possible
- Values reported in shaded cells should be included in the corresponding totals (for this reason it is not recommended to report emissions from shaded cells in the documentation box)

Add documentation box to all tables (would depend on common agreement regarding documentation boxes)

Comments by Parties asking for more information on the precursor gases have not been taken into account given the agreement reached so far (no additional reporting requirements for precursors, such as reporting in sectoral background data tables). If needed, Parties should provide more detailed information on the precursor gases in the NIR (such as how NMVOC estimates from 4.C or 4.F were derived)

The lack of reporting provisions for CO<sub>2</sub> from agricultural soils in the CRF tables on agriculture has not been addressed.

If estimates under category 4.G “Other” were provided, supporting information should be reported in the NIR (or in the documentation box / reference to the NIR depending on the exact purpose documentation boxes will have)

Other information to be included in the NIR rather than in CRF:

- Rice cultivation: further disaggregated data for irrigated, rainfed and other, or disaggregation per cropping season if it is the case, or disaggregation per regions; see also reporting instructions in documentation box to 4.C
- Agricultural soils: disaggregated activity data on crop production (for dry pulses, soybeans and other crops) because of change in AD request in the CRF

### **Recommendations for CRF tables on agriculture**

#### **Tables 4, 4.A, 4.B(a) and 4.B(b)**

- Add footnote to explain that emissions estimates are directly entered in table 4, and IEF in tables 4.A, 4.B (a) and 4.B (b) will not be calculated until the emissions are entered.

#### **Table 4**

- 4.B: allow reporting of other livestock (add “other – please specify”) (take care of existing category “other” referring to AWMS under this source category – see sheet 2 of table 4)

- 4.D.2 Animal production, CH<sub>4</sub>: shade
- 4.D.2: Rename this sub-category to “Pasture, range and paddock manure”
- Footnote referring to GPG chapter 4.4 should be added in order to clarify which manure N<sub>2</sub>O should be reported under 4.B, and which should be reported under 4.D

Table 4.A. 4.B(a) and 4.B(b)

- Insert links between tables for livestock population data (would be solved by software) (shade cells where links will be build in)

Table 4.A

- Additional information: This type of information should only been provided if the Tier 2 was used. The heading should further specify that information be only entered for those livestock types for which the tier 2 was used.
- Change term “average daily feed intake” to “average gross energy intake (GE)”; change the corresponding unit from “MJ/day” to “MJ/head/day”
- Change the term “CH<sub>4</sub> conversion” to “Average CH<sub>4</sub> conversion rate (Y<sub>m</sub>)”; delete unit “%”
- Pending question: change additional info box according to GPG? (or rather defer to NIR due to the level of complexity such a table would have?)
- Pending question: apply the livestock disaggregation recommended in the GPG (one option that could easily be applied in the CRF would be to disaggregate at a minimum cattle and buffalo into 3 sub-categories (cattle: mature dairy cows, mature non-dairy cattle, young cattle/ buffalo: mature dairy buffalo, mature non-dairy buffalo, young buffalo)

Table 4.B (a)

- Allow reporting of other livestock (add “other – please specify”)
- Additional information: split column “solid storage and dry lot” into two columns: “solid storage” and “dry lot”
- Additional information: Add button at the bottom of the table in order to allow reporting information for other livestock
- Column VS daily excretion: change unit from kg dm/head/year to kg dm /head/ day (modify formula for the IEF accordingly to keep referring to “per year” in the IEF)
- The heading for “typical animal mass”, “VS daily excretion” and “Bo” should all refer to “average”

Table 4.C

- Correct unit for “Harvested area”

Table 4.D

- 4.D.1: Add possibility of reporting “other” under the direct soil emissions
- 4.D.1.1: Change description text to “Nitrogen input from application of synthetic fertilizers”

- 4.D.1.2: Change name of sub-source “animal wastes applied to soils” to “animal manure applied to soils”
- 4.D.3 N-fixing crops: change unit from “kg dry biomass/yr” to “kg N/yr”; change description text to wording of the GPG; change unit of IEF accordingly
- 4.D.4: Crop residue: change unit from “kg dry biomass/yr” to “kg N/yr”; change description text to wording of the GPG, change unit of IEF accordingly
- 4.D.2: Rename this sub-category to “Pasture, range and paddock manure”
- 4.D.3 Indirect emissions: Change description text for both sub-sources to “Volatilized N from fertilizers, animal manures and other” and “N from fertilizers, animal manures and other that is lost through leaching and run off”, respectively.
- Additional information: amend list to take into account fractions defined in the GPG; change term FracGRAZ to FracPRP; change footnote (a) to (also) make reference to the GPG (*checking of parameters against current IPCC Guidelines method needed*)

#### Table 4.F

Terms for AD and other related information:

- change “dry matter fraction” to “dry matter fraction of residue”
- insert column for “fraction oxidized” after fraction burned in fields
- change term “biomass burned” to “total biomass burned”
- amend “Nitrogen fraction in biomass of residues” to “N-C ratio in biomass residues”
- insert column for “C fraction of residue”

Delete footnote 1.

#### Recommendations for CRF table 5 on LUCF (see WP 7, pg.8)

Category 5.B Forest and Grassland Conversion:

- Remove shading under “removals” column, add footnote (5)
- Delete footnote 2

#### Recommendations for CRF table Summary 1.A

- Rename headings for “CO<sub>2</sub>” emissions and “CO<sub>2</sub> removals” to “Net CO<sub>2</sub> emissions” and “Net CO<sub>2</sub> removals”
- Category 5.B Forest and Grassland Conversion: Remove shading under “removals” column
- Footnote (5) to apply also to CO<sub>2</sub> under 4.D Agricultural soils