# IPCC Inventory Software

UN Climate Change Conference

5 December 2019

Madrid, Spain
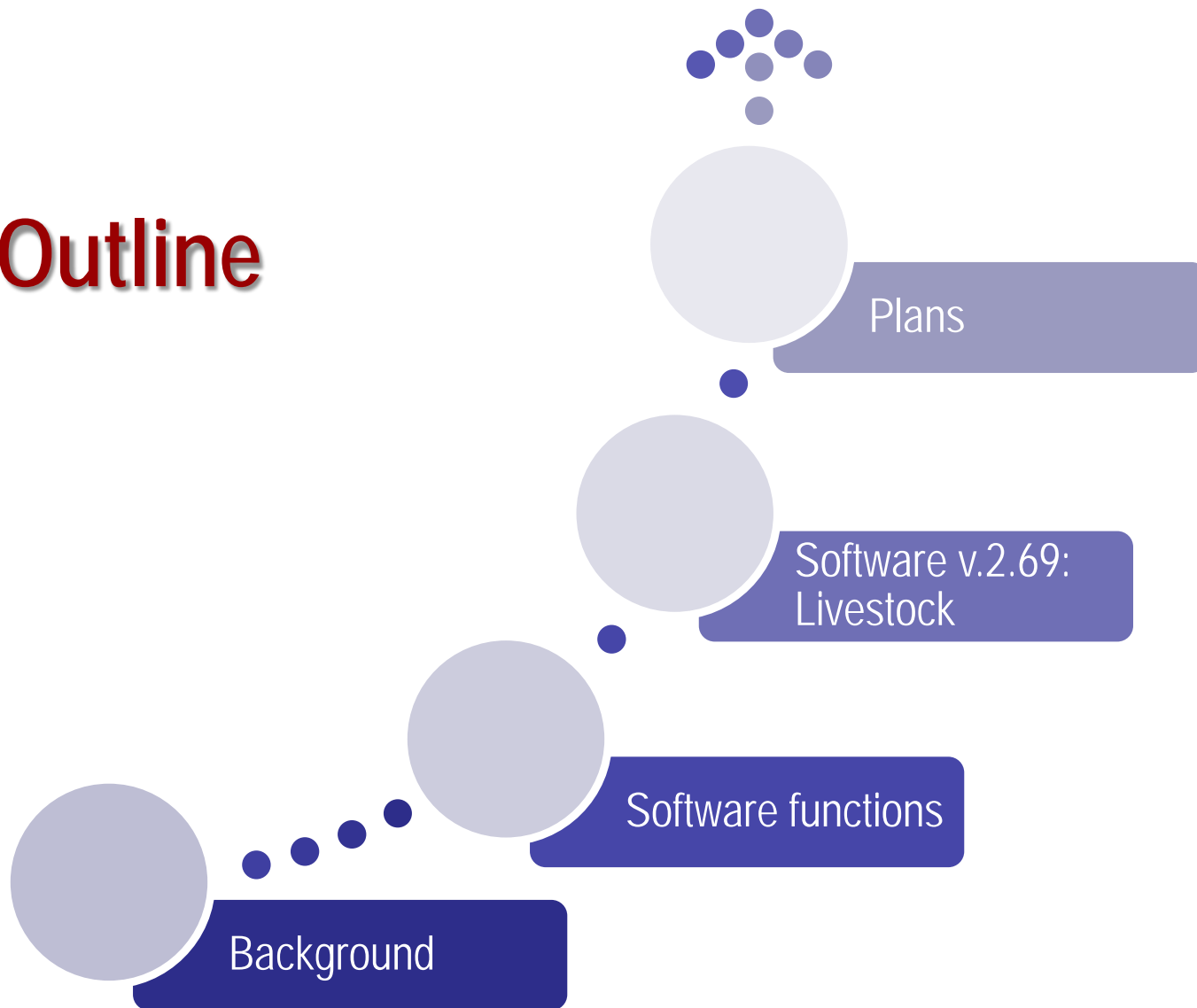
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**ipcc**

INTERGOVERNMENTAL PANEL ON **climate change**

WMO  UNEP

# Outline

Plans

Software v.2.69: Livestock

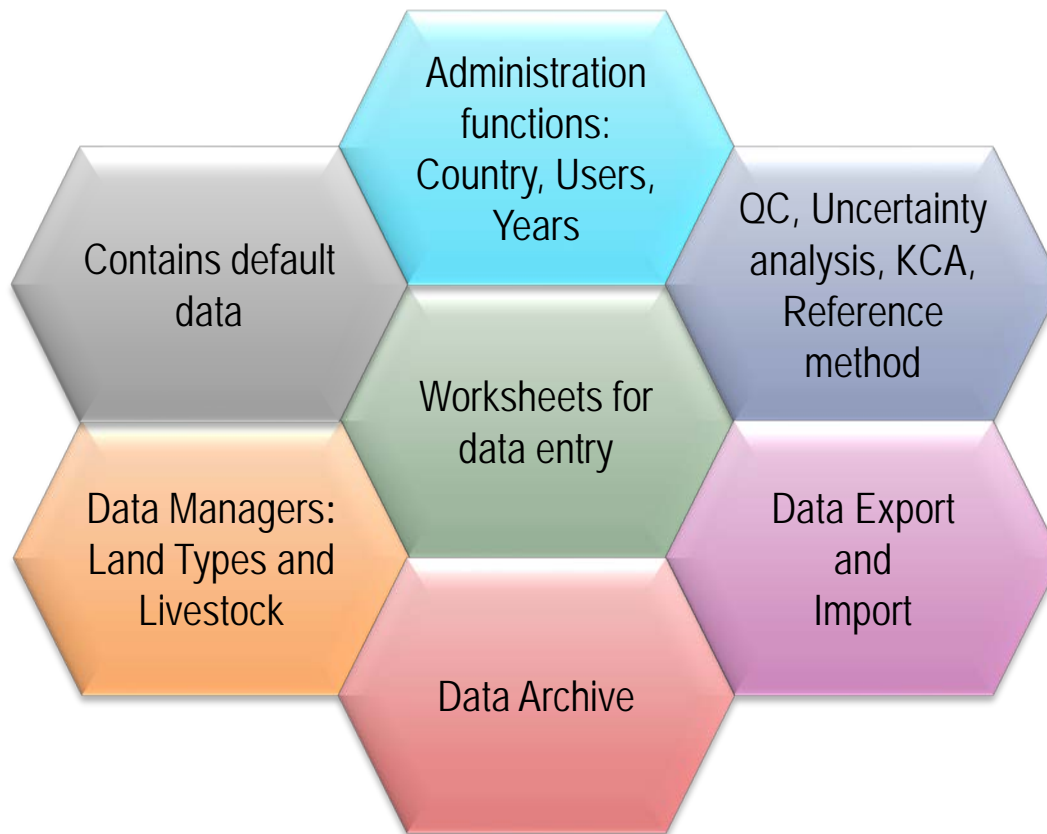Software functions

Background

# Background

❏ **IPCC Inventory Software** is one of the tools produced by IPCC TFI to support development of National GHG Inventories by countries

❏ First Excel-based software was developed for Revised 1996 IPCC Guidelines Workbook, considering its wide usage by the countries at that time (some countries are still using this tool)

❏ In 2012 new MS-Access based IPCC Inventory Software was launched that implements the **2006 IPCC Guidelines**

  ▪ Latest version 2.69 released in October 25, 2019 implements Tier 2 for most Energy, IPPU, Agriculture and Waste emission sources

# Software functions (1)

❑ The software (42.5 MB exe file) can be quickly and freely downloaded from IPCC TFI web-site

❑ It is designed for MS Windows OS, for MacOS a windows emulator is needed

❑ The database is password protected and a hint to recover the password is to be provided (otherwise, once password is lost user can no longer access the database)

❑ Software allows to backup database as MDB file and export/import of worksheet data as XML file

❑ The Software (from v.2.0) can automatically convert the database to the latest version when older version is opened

   ▪ **Please make sure to backup your database before upgrading the software to the new version!**

❑ Non-English User Manual is available in addition to the official English version:

   ▪ French version translated by Government of Belgium
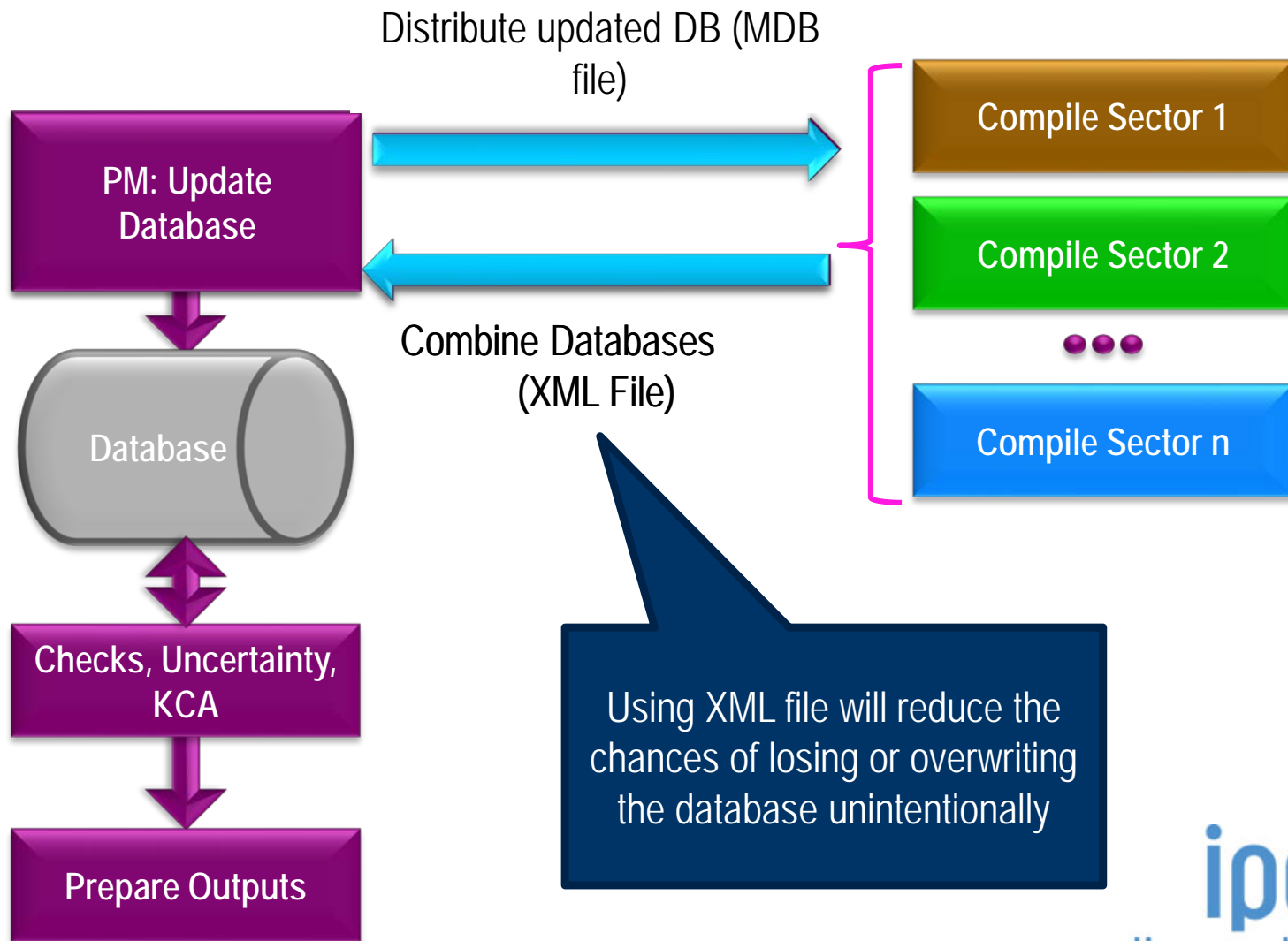   ▪ Arabic version translated by Sidati Ould Dah Ould EIDA (CCPNCC)

# Software Functions (2)



Administration functions: Country, Users, Years

Contains default data

QC, Uncertainty analysis, KCA, Reference method

Worksheets for data entry

Data Managers: Land Types and Livestock

Data Export and Import

Data Archive

# Software functions (3): Data flow between multiple users

**Project manager**

**Sectoral Expert(s)**

Distribute updated DB (MDB file)

PM: Update Database

Compile Sector 1

Compile Sector 2

Compile Sector n

Combine Databases (XML File)

Database

Checks, Uncertainty, KCA

Prepare Outputs

Using XML file will reduce the chances of losing or overwriting the database unintentionally

# Software functions (4): Reports

| Report | Level | Contents |
|---|---|---|
| Summary | 1.A.1 | Emissions |
| Short summary | 1.A | Emissions |
| Sectoral | 1.A.1.a.ii (most disaggregated level) | Emissions |
| Background | 1.A.1.a.ii (most disaggregated level) | Activity data, Emissions |

Note:   *All reports can be exported as MS Excel file*

# Software v.2.69: Livestock (1)
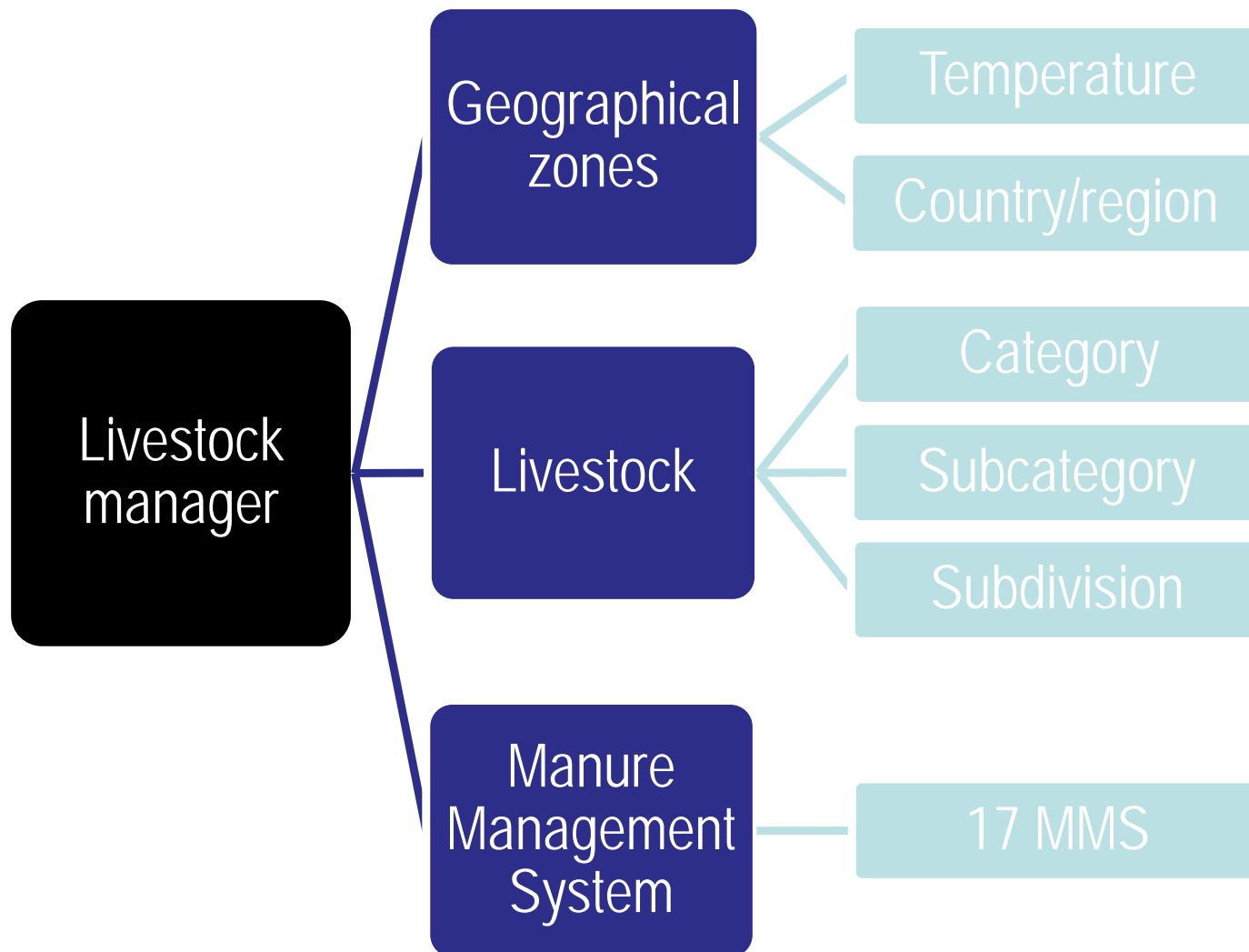
# Software v.2.69: Livestock (2)
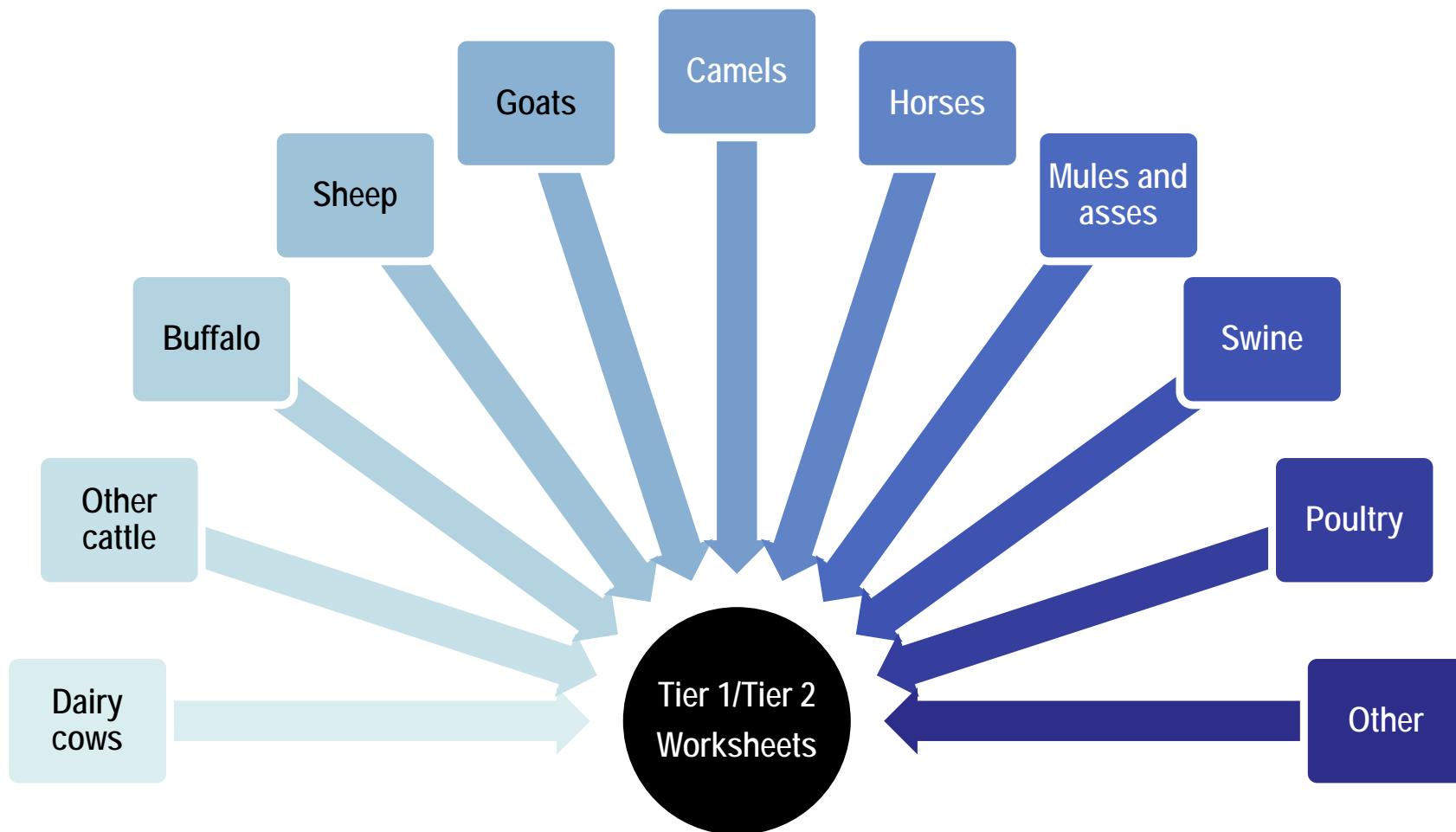
# Software v.2.69: Livestock (3)

❑ **Why IPCC Inventory Software can be considered as user-friendly tool?**

- ▪ Users can estimate emissions based on:

  - ✓ **Tier 1 and Tier 2 for all livestock categories** simultaneously and compare results (QC)

  - ✓ **Detailed and Simplified method** for cattle, buffalo and sheep simultaneously and compare results (QC)

  - ✓ Either Tier 2 or direct input of country-specific data (**Calculated/Specified option**)

  - ✓ **Time series data entry option** for multiple years without need to switch between inventory years

# Software v.2.69: Livestock (4)

- Users do not need to enter data common for several categories several times, once such data inserted software will do their automatic transfer:
  - ✓ From 3A1 to 3A2 and vice versa (e.g. Livestock population, Gross energy intake, Digestible energy etc.)
  - ✓ From Tier 1 to Tier 2 and vice versa (Note: relevant only for livestock population)
- Nitrogen excretion rate data estimated in 3A2 are automatically transferred to relevant 3C categories
- Default IPCC values are provided in drop-down boxes both for Tier 1 and Tier 2 for all livestock categories for users' convenience

# Plans



Time series reporting and multiple sectoral databases compilation*

Completion of Tier 2 and alternative equations for a few non-AFOLU categories*

3B Tier 2 (+Wetlands Supplement)

3B Approach 3: Land Representation*

Uncertainty and KCA: Approach 2*

3C Tier 2

✓ Possibility to produce all outcomes of estimates in XML format, which then can be utilized by any new reporting framework / infrastructure

* Subject to availability of resources

# Thank you!

https://www.ipcc-nggip.iges.or.jp/index.html