



“Club of Bologna”

2023 ANNUAL REPORT

by Marco Fiala
Secretary General (CoB SG)

October 31st, 2023

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1 - President and Secretary General activities (reference period: Nov 20, 2022 – Oct 31, 2023)

This "**Annual Report 2023**" includes and summarizes the activities performed by the CoB President (CoB PR) and Secretary General (CoB SG) in the **period following the 31st Members' Meeting (12-13 November 2022, Bologna - Italy, EIMA International 2022) and the October 31, 2023**, a few days before the the 32nd Club of Bologna Members' Meeting (12-13 November 2023, Hannover - Germany, Agritechnica 2023).

As usual, these tasks were carried out in close collaboration with **Federunacoma** and have been focused on the following **main topics**:

1. General management and contacts with Members
2. CoB activities dissemination; website management and improvement
3. Management Committee (MC) meetings organization
4. 32nd Members' Meeting organization.

1.1 - General management and contacts with Members

These actions mainly concerned:

- after-meeting updating of the **members database** (outgoing and incoming members)
- members database management (membership monitoring, meetings' annual attendance, etc.)
- **internal** exchanges (CoB PR - CoB SG - Federunacoma) and **contacts with club members** mainly by email:

| SECRETARY GENERAL INCOMING EMAILS | |
|---|------------|
| 31 st members' meeting post-meeting tasks | 55 |
| CoB activities dissemination; website management and improvement | 50 |
| Internal meetings; Federunacoma contacts | 25 |
| 32 st Members' Meeting and Management Committee organization | 425 |
| TOTAL | 555 |

Taking into account that, indicatively, to every email received corresponded one of answer, this means that during the reported period, the **email traffic is more than 1100 emails**.

- regular meetings with FederUnacoma, for a total of 6 in the period:

| DATE (HOUR) | MODALITY/PARTICIPANTS |
|--------------------------|---|
| 19 December 2022 (17.00) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |

| DATE (HOUR) | MODALITY/PARTICIPANTS |
|-------------------------|---|
| 11 January 2023 (12.00) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |
| 7 February 2023 (10.00) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |
| 6 April 2023 (0.00) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |
| 30 June 2023 (14.00) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |
| 25 October (9.30) | Online: Marco Pezzini, Patrizia Menicucci, Paolo Balsari, Marco Fiala |

For each internal meeting the CoB SG writes a **short minute of reminders** of the aspects discussed or the decisions taken.

In addition, in order to better organize the Agenda, the interventions and coordinate the topics treated during 32nd Members' Meeting in Hannover, **n.4 online meetings** were carried out both with the Coordinators&Chairmen of the three Sessions of the 32nd Members Meeting (S1: D. Monarca; S2: A. Munack; S3 P. Schulze-Lammers) and with the related Key-Note Speakers.

1.2 - CoB activities dissemination; website management and improvement

1.2.1 Articles on specialized journals/magazines

Thanks to the **Rapporteurs** of the 2022 CoB meeting¹, the "**Session Reports**" have been produced. Subsequently, the CoB SG uploaded these three reports to the CoB site (<https://www.clubofbologna.org/en/meetings-proceedings.php?ANNO=2022>).

1.2.2 Members' Card Project

The "Members Card", which aims to increase the visibility of the specific skills of the "Club of Bologna" through the scientific and professional experience of its members, can be considered finished and must now only be fed with the information requested and coming to the new CoB Members.

Each new FM, in the official letter of admission to the CoB, is infact required to fill online the "**Input Fom**" that allows to CoB SG the generation of "Member Card".

Currently, for **86 Members** (on the 100 in total) the **information set was completed**. Many Members have also provided the list of their most significant **publications**, allowing visitors to the CoB website the use of the search engine (search by "Research Areas and Topics»).

Unfortunately, some FM – despite several reminder emails made by SG – **never compiled the "Input Form" refreshing information**. Consequently, for these FM - who ignored this important CoB activity - the "Member Card" – before the end of 2023 - **will be reduced at the lowest level, leaving online basic information only**.

The results of the Project and the possibilities deriving from the consultation of the different skills/knowledges of each CoB Member must now be illustrated to the machinery manufacturers affiliated to Federunacoma.

In this sense, the **database** built-up with the Project **on specific skills in the field of agricultural mechanization is unique in the world**.

1.2.3 Linkedin Group Project

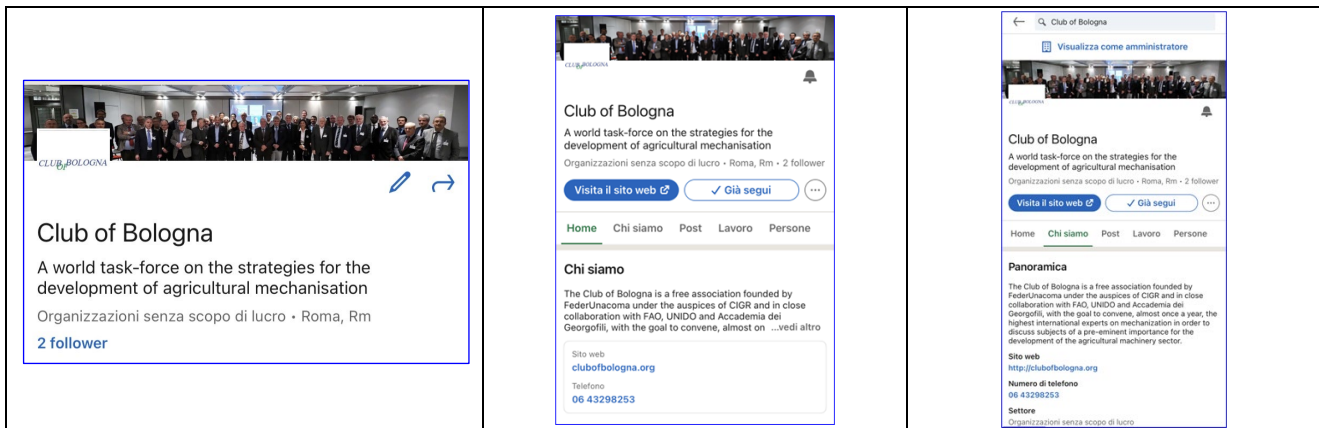
During 2022, the proposal (by Marco Ramm) to create a CoB Social Group on social media "Linkedin" was approved to improve the Club visibility, its members, proposals and documents.

The project "**Linkedin CoB Group**" had a first development step. The CoB SG organized – on **May 15, 2023** - with the presence of Patrizia. Menicucci (Administrative CoB Secretary - Federunacoma), Danilo Monarca (Coordinator SGR Dissemination) and Marco Ramm (Full Member), an online meeting to start the discussion about this project, and related rules and organization.

Following the results achieved during the meeting and from which a second Project step will start:

¹ Christian Birkmann, Andrii Yatskul, Antonio Miranda-Fuentes.

- the **profile** was created by Patrizia Menicucci (Administrative Secretary): <https://www.linkedin.com/company/club-of-bologna/>, and it is already running. **Info pages**, were created, as well



- administrators** have been defined: P. Menicucci (Federunacoma); D. Monarca (SG Dissemination Coordinator); M. Ramm (Full Member) and M. Fiala (CoB SG)
- a first approach for **structure and organization** was defined: **WHO** → Everybody can follow the profile (CoB FM or not). CoB FM can send information to Administrators, asking to be published and shared. A critical aspect could be that not all CoB Members have a LinkedIn profile, but in order to encourage them to run the app, a letter of information and 2 min. demo video (how to follow, advantages, opportunities, etc.) could be prepared; **WHAT** → **only fresh&quick news must be uploaded (i.e.: meetings, Pellizzi Prize Notice, Members info, new Members, everything concerning CoB activities, relevant agro-mechanical news, agro-mechanical international meetings, interesting papers/articles, relevant activities carried out by CoB member, like researches, incoming webinars and events, appointments etc., CoB history, previous meetings and Pellizzi Prize, links to 30-year videos);** **WHEN** → a minimum editorial plan requests to publish at least 2-3 posts per month.
- finally, taking into account that not all CoB Members will have a LinkedIn profile, a specific communication – sign by SGR Dissemination Coordinator - will be sent to all the CoB Members, explaining them the meaning of the **LinkedIn CoB Group** and the related possibilities, as well as, inviting them: (i) to open a LinkedIn profile, (ii) follow the CoB page, (iii) collaborate in its life and circulation.

1.2.4 Study Groups (SGR)

All the Coordinators² have maintained contacts between the members of the n.4 SGR and during the 32nd Members' Meeting will be reserved a slot to allow the Coordinators to illustrate the activities conducted.

² **SGR1** "Sustainable Agricultural Mechanization in Africa" (chaired and organized by Josse De Baerdemaeker), **SGR2** "Dissemination" (chaired and organized by Danilo Monarca, **SGR3** "Ethics of the future agricultural mechanization development" (chaired and organized by Peter Pickel) and **SGR4** "Evaluation of the incentives for the improvement of the agricultural mechanization in the world" (chaired and organized by Emmanuel Hugo).

1.2.5 Website management and improving

The website of the “Club of Bologna” (see: www.clubobologna.org) has been continuously improved, with the goal to **increase its accessibility and usability and the number of information/documents that is possible to download.**

1.2.5.1 Ordinary activities

The main actions made during the period focused on:

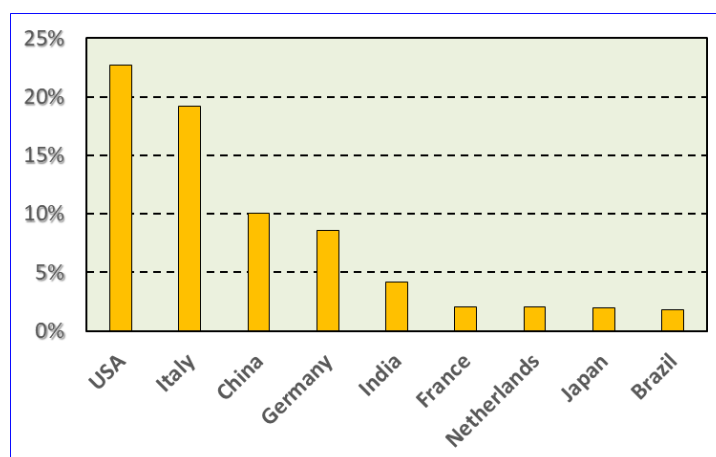
- **CoB 2023 Annual Report** - Uploading of the summary document concerning the CoB activities during 2022-2023 period, drawn up by the Secretary General (SG)³, also containing a series of membership statistics (see: <https://www.clubofbologna.org/en/documents.php>, year 2023);
- **Proceedings 31st Members’ Meeting** - Uploading of: (i) the **KeyNote Reports** (full text) discussed in Bologna 2022 meeting, (ii) the Author(s) **presentations**, and (iii) the **Conclusions** made by the Session’s Chairmen (see: <https://www.clubofbologna.org/en/meetings-proceedings.php>, year 2022);
- News - uploading of important **event or information** concerning the life of the CoB and its Members.

The degree of visibility of the “Club of Bologna” web site has so far been illustrated through *Google Analytics* tool. However, the analysis methods of the Google app **were changed in July 2023**. Comparisons between 2021-2022 and 2022-2023 are therefore insignificant.

Briefly- during the reference period - for this “Annual Report” we can only underline:

- **total number of sessions:** 2.600
- **visualized pages:** 7.500 (i.e.: 2,9 pages/session)
- **geographical distribution of the connections** shows that more than 50% of them takes place from three countries (USA, Italy, China) (**Figure 1**)

Figure 1 – Distribution of connections to www.clubofbologna.org (Nov 20, 2022 – Oct 31, 2023).



³ Presented to the Management Committee of the “Club of Bologna” at Hannover meeting (November 9, 2019) and Bologna meeting (October 21, 2021), respectively.

1.2.5.2 *Straordinary activities*

The main non-routine actions made for CoB website during the period, concerned the "Members Card" final development (see § 1.2.2).

1.3 - Management Committee Meetings

1.3.1 MC online meetings

In agreement with Federunacoma, **one** online MC members meeting on **April 14, 2023** was organized.

This meeting, - scheduled at a daytime acceptable to Members both from the Far East (Japan) and North America (USA) – had the **participation of 9 Members of the governing body of the Club**.

The SG drafted a **Minutes**, which he then sent (18 May 2023) to all MC Members via email, for eventual comments and remarks (see [Annex 1](#))

No MC Member sent any comments and, therefore, the document can go to the approval during the MC Meeting in presence, on November 11, 2023.

1.4 - 31st Members' Meeting organization

1.4.1 Agenda and Session Chairmen

The **Agenda** of the 32nd Members' Meeting in Hannover (12-13 November 2023) was organized on the basis of the last MC Members' Meetings (i.e.: Bologna, Nov 2022; online April 14, 2023):

- **SESSION 1 – AGRICULTURAL USED AREA (AUA) DECREASE, WORLD POPULATION INCREASE, CLIMATE CHANGE: ROLE OF MECHANIZATION**, with n.4 Key-Note Reports, chaired by Danilo Monarca (Italy), Rapporteur: Alireza Pourreza (USA)
- **SESSION 2 – PREDICTIVE AND LONG DISTANCE MAINTENANCE**, with n.3 Key-Note Reports, chaired by Axel Munak (Germany), Rapporteur: Dana Choi (USA)
- **SESSION 3 – SPECIFIC MECHANIZATION: MACHINES FOR SUGAR BEET AND POTATO**, with n.4 Key-Note Reports, chaired by Peter Schulze-Lammers (Germany), Rapporteur: Hao Han (USA).

Before the "Closing Session" there will be interventions by the Coordinators of the n.4 **Study Groups** to illustrate the activities carried out during the period; Finally, at the end of Session 2 (Sunday late afternoon) and the meeting (Monday afternoon), **Free Visits** to Agritechnica 2023 are also organized.

As usual, each "Session Rapporteur" on the basis of the Key-Note Reports presented at the Session, the subsequent discussion and the Key-Sentences collected among the participants⁴, will write a **brief** (2-3 pages) **Technical Report**. These reports, will be uploaded on the CoB website, within the Meeting's Proceedings.

The **Members' Meeting Agenda** is given in [ANNEX 2](#).

⁴ The **empty docx. form** to fill out the Key-Sentences is already available on the Club's website at <https://www.clubofbologna.org/en/meetings-proceedings.php>. All participants can access, download the file, type their own comments and mail the file to CoB SG.

2. Membership

2.1 Management Committee (MC) Members

During the reference period, **no requests** about variations of the Management Committee composition have been submitted by the MC Members to the Cob SG attention:

MC MEMBERS LIST VARIATION (Nov 2022 – Oct 31, 2023)

| NAT | TY | NEW MEMBER | AGENCY | ACTION |
|-----|----|------------|--------|--------|
| - | - | - | - | - |

Therefore, the CoB Management Committee is currently composed as follows:

| N | NAT | TYPE | NAME | Nov 2016 – Oct 2021 MC MEMBERS | COUNTRY |
|----|-----|---|---------------------|---|---------|
| 1 | ITA | PRESIDENT MEMBER | BALSARI Paolo | Univ. of Torino, Dept. DEIAFA | ITA |
| - | ITA | SECRETARY GENERAL PERMANENT MEMBER | FIALA Marco | Univ. of Milano, Dept. DiSAA | ITA |
| - | @ | FEDEERUNACOMA DELEGATE PERMANENT MEMBER | PEZZINI Marco | Italian Agricultural Machinery Manufacturers Federation | ITA |
| 2 | MAR | MEMBER | BARTALI El Houssine | ANAFID - National Association Land Reclamation, Irrigation and Drainage | MAR |
| 3 | ESP | MEMBER | GIL Emilio | Univ. Politècnica de Catalunya - BarcelonaTech | ESP |
| 4 | JPN | MEMBER | KISHIDA Yoshisuke | Shin-Norinsha Co. Ltd | JAP |
| 5 | ITA | MEMBER | MONARCA Danilo | Univ. of Viterbo "La Tuscia", Dept. DiBAF | ITA |
| 6 | DEU | MEMBER | MUNACK Axel | Expert | DEU |
| 7 | GER | MEMBER | PICKEL Peter | JOHN DEERE Werke Mannheim | DEU |
| 8 | DEU | MEMBER | RENIUS Karl | Expert | DEU |
| 9 | USA | MEMBER | SCHUELLER John | Univ. of Florida, Mechanical and Aerospace Engineering Dept. | USA |
| 10 | IND | MEMBER | SINGH Gajendra | Expert | IND |
| 11 | JOR | MEMBER | SNOBAR Bassam | Expert | JOR |
| | ITA | INVITED MEMBER PAST PRESIDENT | BODRIA Luigi | Expert | ITA |
| | ITA | INVITED MEMBER PAST PRESIDENT | GASPARETTO Ettore | Expert | ITA |

The members of the current MC will remain in office until the MC Members' Meeting that will be held in conjunction with the 33rd "Club of Bologna" Members' Meeting (November, 2024, Bologna - Italy; EIMA International 2024).

According to the current club "Internal Rules" (<https://www.clubofbologna.org/en/internal-rules.php>, articles 9 and 11), during this MC Members Meeting, all current MC Members will lapse and **Federunacoma will have to elect - among the Full Members - both the new Members of the Management Committee** (up to a maximum of 15) and, **among them, the President**.

It is therefore very important that the indications on the new composition - are discussed (MC Members' online Meeting) by the **Spring of 2024**.

2.2 Full (FM) Members

2.2.1 Current situation

The membership situation of the "Club of Bologna" is updated on **31st October 2023** is represented by a **total of 100 Members** (92 Full Members and 8 Pellizzi Prize Winners).

The data source is the “Club of Bologna” **official database**, managed by the CoB SG by a MSeXcel file. **Figures 2, 3 and 4** provide more details on the current composition of the "Club of Bologna".

Figure 2 – “Club of Bologna” composition.

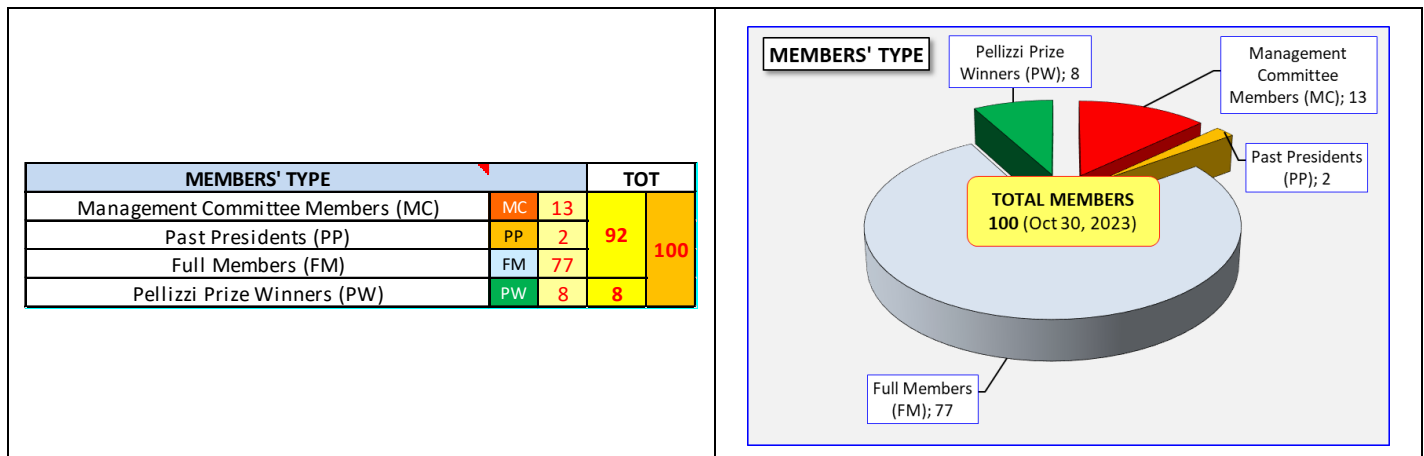


Figure 3 – “Club of Bologna” Members’ occupation.

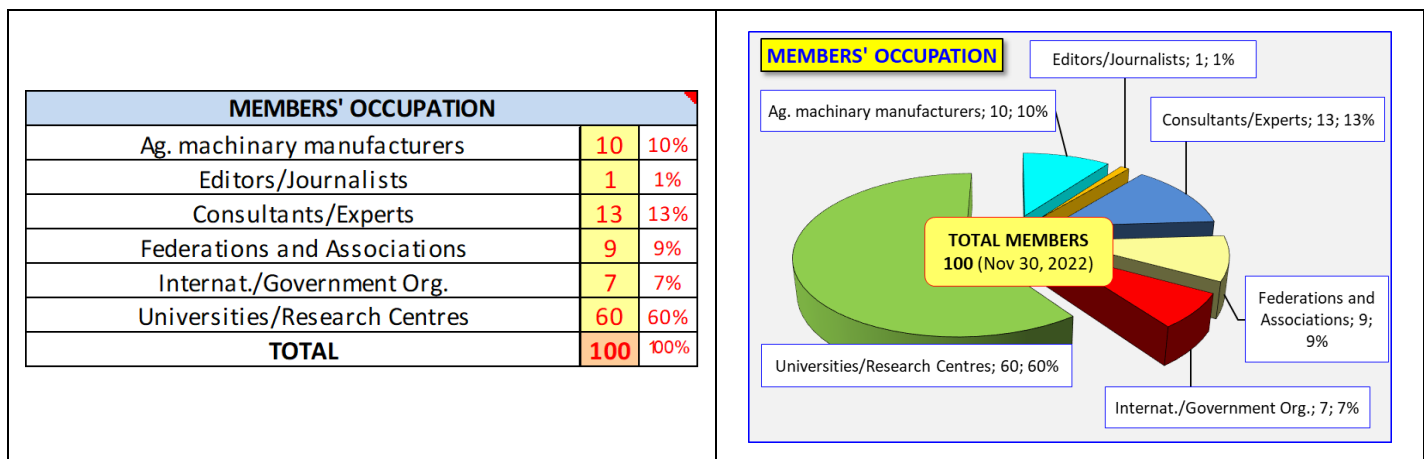
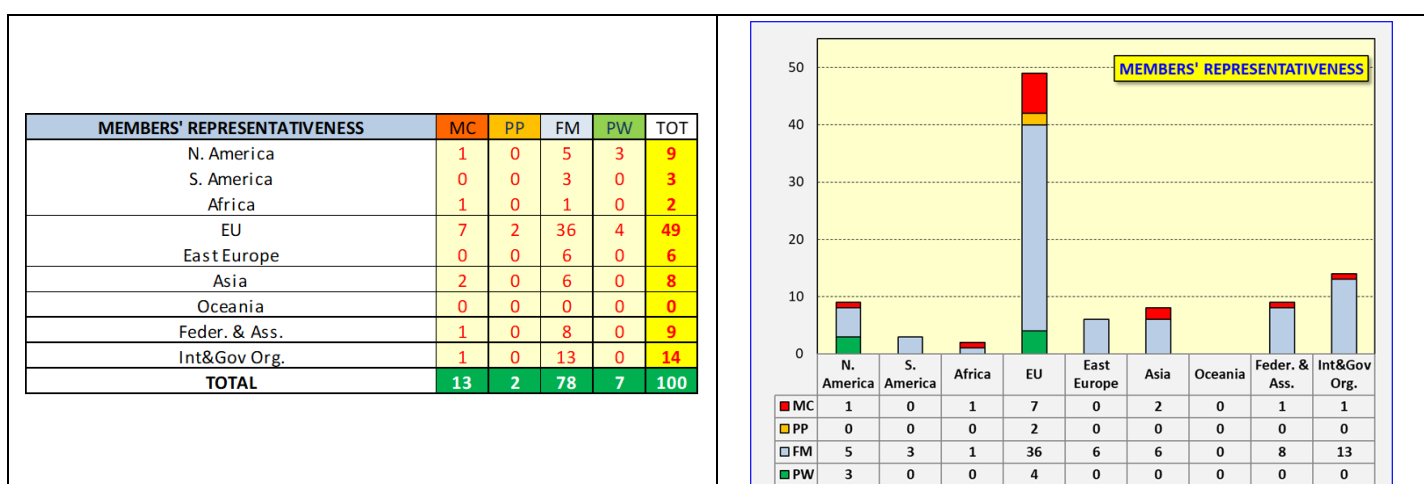


Figure 4 – “Club of Bologna” world area representativeness.



Currently, within the “Club of Bologna”:

- **30 Countries** are represented (**Table 1**):.

Table 1 – “Club of Bologna” Countries representativeness.

| MEMBERS PER COUNTRY | | | | | |
|------------------------------|----|----|----|----|-----|
| COUNTRY | MC | PP | FM | PW | TOT |
| Internat./Governative Org. | 1 | | 13 | | 14 |
| Federations and Associations | 1 | | 8 | | 9 |
| Argentina | | | 1 | | 1 |
| Austria | | | 1 | | 1 |
| Belgium | | | 2 | | 2 |
| Bulgaria | | | 1 | | 1 |
| Brasil | | | 2 | | 2 |
| People Republic China | | | 1 | | 1 |
| Czech Republic | | | 1 | | 1 |
| Germany | 3 | | 8 | 1 | 12 |
| Denmark | | | 1 | | 1 |
| Spain | 1 | | 2 | 1 | 4 |
| France | | | | 1 | 1 |
| United Kingdom | | | 1 | | 1 |
| Greece | | | 1 | | 1 |
| Croatia | | | 1 | | 1 |
| Hungary | | | 2 | | 2 |
| India | | | 1 | | 1 |
| Italy | 3 | 2 | 10 | 1 | 16 |
| Jordan | 1 | | | | 1 |
| Japan | 1 | | 4 | | 5 |
| Morocco | 1 | | | | 1 |
| Netherlands | | | 3 | | 3 |
| Norway | | | 1 | | 1 |
| Portugal | | | 2 | | 2 |
| Serbia | | | 1 | | 1 |
| Sweden | | | 1 | | 1 |
| Switzerland | | | 1 | | 1 |
| Ukraine | | | 1 | | 1 |
| United States | 1 | | 5 | 3 | 9 |
| Russia Federation | | | 1 | | 1 |
| Nigeria | | | 1 | | 1 |

The participation to the Club of some significant Area/Country **seems to be still improved** since their relevance in world agriculture (example: Australia, New Zealand, Poland, Romania; China, Egypt, Tunisia, South-Africa, Kenya).

CoB Members List (October 31st, 2023)

Table 2 – The “Club of Bologna” Members

Legend for NAT field: (#) International/Government Organizations; (@) Federation and Associations

Legend for T_Member field: MC = Management Committee member; PP = Past President; FM = Full Member; PW = Pellizzi Prize Winners

Legend for T_AGENCY field: U&R = Univ.&Research Centre; ORG = Intern./Govern. Organiz.; AGM = Ag. Machinery Manufacturer; F&A = Feder.&Assoc.; EDI = Editor; C&E = Consultant/Expert

| N | NAT | T_MEMBER | SURNAME | NAME | AGENCY/INSTITUTION | T_AGENCY | E_MAIL |
|----|-----|----------|--------------------|------------------|--|----------|---|
| 1 | NIG | FM | ALONGE | Akindele Folarin | Univ. Uyo, Dept of Agricultural and Food Engineering, Faculty of Engineering | U&R | akindealonge@uniuyo.edu.ng ; falonge6@gmail.com |
| 2 | DEU | FM | AUERNHAMMER | Hermann | - | U&R | hermann@auernhammer.de |
| 3 | ITA | MC | BALSARI | Paolo | Univ. Studi Torino, Dip. DiSAFA | U&R | paolo.balsari@unito.it |
| 4 | MAR | MC | BARTALI | El Houssine | ANAFID - National Association for Land Reclamation, Irrigation and Drainage | U&R | h.bartali@iav.ac.ma |
| 5 | BRA | FM | BELLANDI | Alida | GUARANY IND. | AGM | alida.bellandi@guaranyind.com.br |
| 6 | DEU | PW | BIRKMANN | Christian | CLAAS Industrietechnik GmbH | AGM | crb@gmx.de |
| 7 | NOR | FM | BJUGSTAD | Nils | Norwegian Univ. of Life Sciences, Dept. of Mathematical Sciences and Technology | U&R | nils.bjugstad@nmbu.no |
| 8 | @ | FM | BOCQUET | Guillame | Union des Industriels de l'Agroéquipement (AXEMA) | F&A | g.bocquet@axema.fr |
| 9 | ITA | PP | BODRIA | Luigi | - | C&E | luigi.bodria@unimi.it |
| 10 | DEU | FM | BÖTTINGER | Stefan | Univ.Hohenheim, Inst. for Agricultural Engineering | U&R | boettinger@uni-hohenheim.de |
| 11 | ITA | FM | CAVALCHINI | Antoniotto | - | C&E | antoniotto.cavalchini@unimi.it |
| 12 | # | FM | CAVALLO | Eugenio | Inst. Sciences and Technologies for Sustainable Energy and Mobility (CNR-STEMS) | ORG | e.cavallo@imamoter.cnr.it |
| 13 | ARG | FM | CETRANGOLO | Hugo | Univ. Buenos Aires, College of Agriculture | U&R | hacetrangolo@yahoo.com |
| 14 | BRA | FM | CHARTUNI-MANTOVANI | Evandro | EMBRAPA - Empresa Brasileira de Pesquisa Agropecuaria, Parque Estação Biológica (PqEB) | U&R | evandro.mantovani@embrapa.br |
| 15 | USA | PW | CHOI | Daeun | Univ. Pennsylvania State, Dept. of Agricultural and Biological Engineering | U&R | dxc519@psu.edu |
| 16 | BEL | FM | DE BAERDEMAEKER | Josse | KU Leuven, Fac. Bioscience Engineering, Div. Mechatronics, Biostatistics and Sensors (MeBioS) | U&R | josse.debaerdemaeker@biw.kuleuven.be |
| 17 | @ | FM | ELIZAROVA | Alla | Russian Association Specialized Machinery&Equipment Manufacturers (ROSSPETMASH) | F&A | eav@rosspetsmash.ru ; EAV@agrosalon.ru |
| 18 | ITA | FM | FEBO | Pierluigi | Univ. Palermo | U&R | pierluigi.febo@unipa.it |
| 19 | HUN | FM | FENYVESI | László | Univ. Szent István, Faculty of Mechanical Engineering | U&R | fenyvesi.laszlo@gek.szie.hu |
| 20 | ITA | MC | FIALA | Marco | Univ. Studi Milano, Dip. Scienze Agrarie e Ambientali. Produzione, Territorio, Agroenergia (DiSAA) | U&R | marco.fiala@unimi.it |
| 21 | GRC | FM | FOUNTAS | Spiros | Agricultural Univ. Athens, Dept. Natural Resources Management and Agricultural Engineering | U&R | sfountas@aua.gr |

| | | | | | | | |
|----|-----|----|-------------|-----------------|--|-----|---|
| 22 | # | FM | GAMLIEL | Abraham | Agricultural Research organization (ARO), Volcani Center | U&R | agamliel@agri.gov.il ; agamliel@volcani.agri.gov.il |
| 23 | USA | PW | GAN | Hao | Univ. Tennessee | U&R | hgan1@utk.edu |
| 24 | ITA | PP | GASPARETTO | Ettore | - | C&E | ettore.gasparetto@unimi.it |
| 25 | ITA | FM | GAVIOLI | Giuseppe | - | C&E | giuseppe.gavioli@gmail.com |
| 26 | ITA | FM | GAY | Paolo | Univ. Studi Torino, Dip. DiSAFA | U&R | paolo.gay@unito.it |
| 27 | ITA | FM | GIAMETTA | Gennaro | - | U&R | gegiamet@gmail.com |
| 28 | ESP | MC | GIL | Emilio | Univ. Politècnica de Catalunya - BarcelonaTech | U&R | emilio.gil@upc.edu |
| 29 | ITA | PW | GRELLA | Marco | Univ. Studi Torino, Dip. DiSAFA | U&R | marco.grella@unito.it |
| 30 | AUT | FM | GRONAUER | Andreas | Univ. Natural Resources and Life Sciences, Inst. of Agricultural Engineering | U&R | andreas.gronauer@boku.ac.at |
| 31 | USA | FM | HANSEN | Alan | Univ. of Illinois at Urbana, Dept. of Agricultural and Biological Engineering | U&R | achansen@illinois.edu |
| 32 | PRT | FM | HAWKEN | Keith | Univ. of Evora | U&R | keith.hawken@sapo.pt |
| 33 | @ | FM | HOSTENS | Ivo | European Agricultural Machinery Association (CEMA) | F&A | ivo.hostens@cema-agri.org |
| 34 | # | FM | HOUMY | Karim | Food and Agriculture Organization of the United Nations (FAO) (consultant) | C&E | karim.houmy@fao.org ; k_houmy@yahoo.fr |
| 35 | # | FM | HUGO | Emmanuel | France National Research Institute for Agriculture, Food and Environment (INRAE) | U&R | emmanuel.hugo@inrae.fr |
| 36 | ESP | FM | JAREN | Carmen | Univ. Pública de Navarra, Dpto. de Proyectos e Ingeniería Rural | U&R | cjaren@unavarra.es |
| 37 | IND | FM | KESAVAN | Thekkepat Raman | TREACTORA&FARM EQUIPMENT Ltd. | AGM | trkesavan@tafe.com |
| 38 | CZE | FM | KIC | Pavel | Czech University of Life Sciences Prague, Faculty of Engineering | U&R | kic@tf.czu.cz |
| 39 | # | FM | KIENZLE | Josef | Food and Agriculture Organization of the United Nations (FAO) | ORG | josef.kienzle@fao.org |
| 40 | JPN | MC | KISHIDA | Yoshisuke | Shin-Norinsha Co. Ltd | EDI | ama@shin-norin.co.jp |
| 41 | NLD | FM | KOLE | Jaco | Stichting Kwaliteitseisen Landbouwtechniek (SKL) (Found. for Quality Control of Ag. Equipment) | U&R | j.kole@skleuring.nl |
| 42 | JPN | FM | KONDO | Naoshi | Univ. Kyoto, Bio-Sensing Engineering Lab. | U&R | kondo.naoshi.6w@kyoto-u.ac.jp |
| 43 | @ | FM | KORCHEVOY | Evgeniy | Russian Association of Agricultural Machinery Manufacturers (ROSAGROMASH) | F&A | info@rosagromash.ru |
| 44 | HRV | FM | KOVACEV | Igor | Univ. Zagreb, Faculty of Agronomy, Dept Agricultural Engineering | U&R | ikovacev@agr.hr |
| 45 | UKR | FM | KRAVCHUK | Volodymyr | L. Pogorilyy Ukrainian Sc. Res. Inst. Forecasting&Testing Mach.&Techn. Ag. Prod (USRIFTMTAP) | U&R | ndipvt@ukr.net |
| 46 | GBR | FM | LANDERS | Andrew | Effective Spraying | C&E | ajl31@cornell.edu |
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| | | | | | | | |
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| 82 | SCG | FM | SAVIN | Lazar | Univ. of Novi Sad, Faculty of Agriculture | U&R | lazar.savin@polj.uns.ac.rs |
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| 85 | USA | FM | SHEARER | Scott | Univ. of Ohio State, Dept of Food, Agricultural and Biological Engineering | U&R | shearer.95@osu.edu |
| 86 | @ | FM | SINGH | Surendra | Agricultural Machinery Manufacturers Association (AMMA India) | F&A | ammaindia10@gmail.com |
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| 97 | # | FM | ZAZUETA | Fedro | Intern. Comm. Agricultural&Biosystems Eng. (CIGR); Univ. of Florida, Office Information Techn. | U&R | fsz@ufl.edu |
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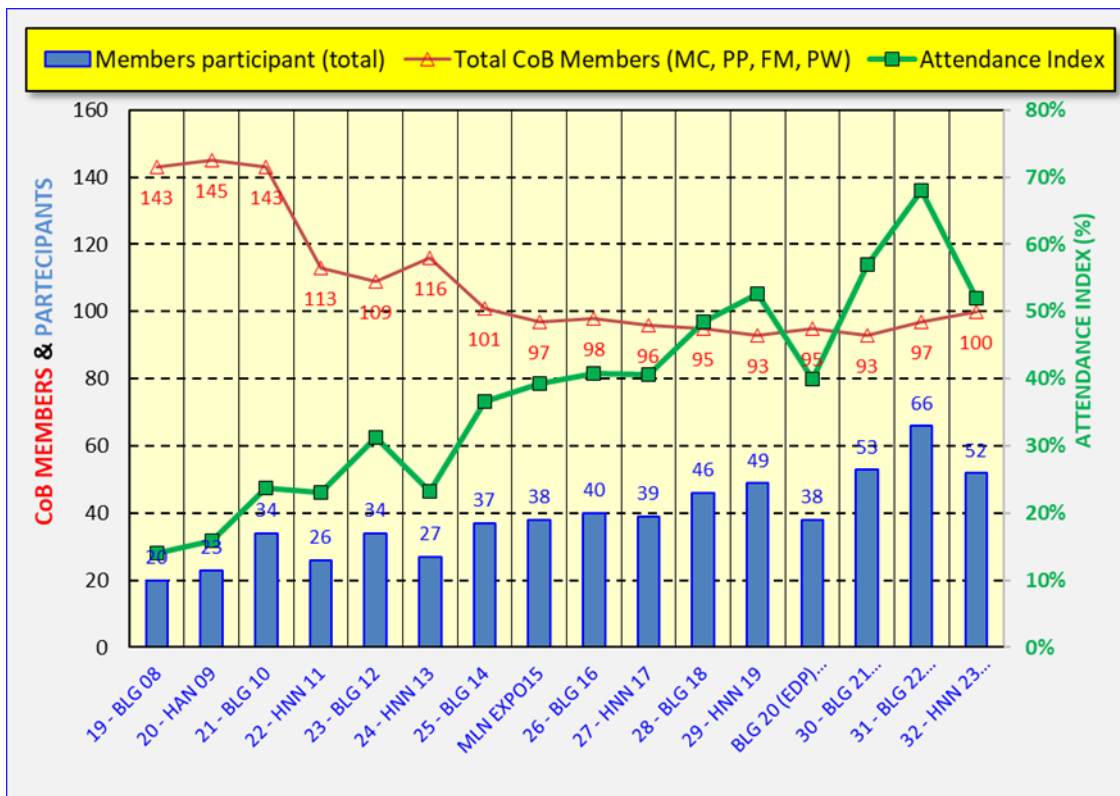
2.2.2 Attendance to the Members' Meetings

The **historical trend of the attendance** of the Members to the “Club of Bologna” Members’ Meetings is showed in **Figure 5**.

In the last 5 years the number of Members who attend the annual meetings, rises from **39** (HNN 2017) to **54** (BLG 2021).

The data of the 32nd Members Meeting are only **provisional**: the real attendance will be computed only at the end of the meeting. **If the pre-announced attendance will be confirmed, the Attendance Index** (AI = Participant CoB Members/ CoB Members) for this meeting will be **52%**, decreasing compared to recent years.

Figure 5– 1989-2023 attendance: general figure (Note: BLG = Bologna; HAN = Hannover).








Note: Since “BLG 16” Pellizzi Prize Winners are included in CoB Members (n.3: 2016; n.4: 2018; n.8: 2022)

2.2.3 Individual Member Attendance Index

For the evaluation of the “**Individual Member Attendance Index (IMAI)**”, the attendance to CoB Members’ Meetings of each Member **over the last 5 and 10 years** is analyzed. The incoming 32nd meeting is not take into account, since the participation is “expected” and needs to be really verified.

The values delimiting the IMAI **five classes** are as follows⁵:

⁵ The numerical limit of the classes has been approved by MC Members in 2023 meeting (Bologna). Of course, the MC can modify the values, determining the variation of the results.

| | | MIN | MAX |
|------------|---|-----|-----|
| Excellent |  | | 75% |
| Good |  | 50% | 75% |
| Sufficient |  | 25% | 50% |
| Low |  | 0% | 25% |
| Bad |  | | 0% |

Due to the difficulties related to the SARS-Cov2, the **Absences** at the 2020-21 meetings (Bologna EIMA DIGITAL PREVIEW, online and Bologna EIMA INTERNATIONAL 2020-21), were not taken into account. On the contrary, the **attendance** (both online and in presence), are computed.

Applying the analysis to the **past 5** (2018-2022) and **10** (2013-2022) **years** CoB members' Meetings, the index situation is shown in (**Table 3**).

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|-----|----|-------------|-----------------|---|---|---|---|---|-----|---|----|-----|-----|----|---|---|------|------|-----|---|---|------|------|-----|---|
| 25 | ITA | FM | GAVIOLI | Giuseppe | A | P | P | P | P | A | P | AA | P | P | 5 | 1 | 1 | 75% | 😊 | 10 | 2 | 1 | 78% | 😊😊 | | |
| 26 | ITA | FM | GAY | Paolo | | | | | | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 6 | 0 | 0 | 100% | 😊😊 | | |
| 27 | ITA | FM | GIAMETTA | Gennaro | A | P | A | A | A | P | A | AA | AA | P | 5 | 1 | 2 | 67% | 😊 | 10 | 5 | 2 | 38% | 😊 | | |
| 28 | ESP | MC | GIL | Emilio | | G | P | P | P | P | P | | O | P | 5 | 0 | 0 | 100% | 😊😊 | 8 | 0 | 0 | 100% | 😊😊 | | |
| 29 | ITA | PW | GRELLA | Marco | | | | | | PPW | A | AA | PPW | PPW | 4 | 1 | 1 | 67% | 😊 | 4 | 1 | 1 | 67% | 😊 | | |
| 30 | AUT | FM | GRONAUER | Andreas | | G | P | P | P | P | P | AA | AA | O | 5 | 0 | 2 | 100% | 😊😊 | 7 | 0 | 2 | 100% | 😊😊 | | |
| 31 | USA | FM | HANSEN | Alan | P | P | P | P | P | P | A | O | AA | A | 5 | 2 | 1 | 50% | 😊 | 10 | 2 | 1 | 78% | 😊😊 | | |
| 32 | PRT | FM | HAWKEN | Keith | P | P | A | P | P | P | P | O | O | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 1 | 0 | 90% | 😊😊 | | |
| 33 | @ | FM | HOSTENS | Ivo | G | | | | A | P | A | A | AA | AA | P | 5 | 2 | 2 | 33% | 😊 | 6 | 3 | 2 | 25% | 😞 | |
| 34 | # | FM | HOUMY | Karim | | | | | | | | | O | O | P | 3 | 0 | 0 | 100% | 😊😊 | 3 | 0 | 0 | 100% | 😊😊 | |
| 35 | # | FM | HUGO | Emmanuel | P | P | P | P | P | P | P | AA | P | P | 5 | 0 | 1 | 100% | 😊😊 | 10 | 0 | 1 | 100% | 😊😊 | | |
| 36 | ESP | FM | JAREN | Carmen | | | | | A | A | A | P | O | O | P | 5 | 1 | 0 | 80% | 😊😊 | 7 | 3 | 0 | 57% | 😊 | |
| 37 | IND | FM | KESAVAN | Thekkepat Raman | G | A | P | P | A | A | A | AA | P | A | 5 | 3 | 1 | 25% | 😞 | 9 | 5 | 1 | 38% | 😊 | | |
| 38 | CZE | FM | KIC | Pavel | A | P | A | P | A | P | A | AA | AA | O | 5 | 1 | 2 | 67% | 😊 | 10 | 4 | 2 | 50% | 😊 | | |
| 39 | # | FM | KIENZLE | Josef | P | P | P | P | P | P | P | AA | P | P | 5 | 0 | 1 | 100% | 😊😊 | 10 | 0 | 1 | 100% | 😊😊 | | |
| 40 | JPN | MC | KISHIDA | Yoshisuke | P | P | P | P | P | P | P | AA | AA | P | 5 | 0 | 2 | 100% | 😊😊 | 10 | 0 | 2 | 100% | 😊😊 | | |
| 41 | NLD | FM | KOLE | Jaco | | | | | | | | | | P | 0 | 0 | 0 | nc | | 0 | 0 | 0 | nc | | | |
| 42 | JPN | FM | KONDO | Naoshi | | | | | | | A | A | AA | AA | A | 5 | 3 | 2 | 0% | 😞😞 | 5 | 3 | 2 | 0% | 😞😞 | |
| 43 | @ | FM | KORCHEVOY | Evgeniy | A | A | A | A | A | A | A | AA | AA | A | 5 | 3 | 2 | 0% | 😞😞 | 10 | 8 | 2 | 0% | 😞😞 | | |
| 44 | HRV | FM | KOVACEV | Igor | | | | | | G | A | O | P | P | 4 | 1 | 0 | 75% | 😊 | 4 | 1 | 0 | 75% | 😊 | | |
| 45 | UKR | FM | KRAVCHUK | Volodymyr | | A | P | A | A | P | P | AA | AA | A | 5 | 1 | 2 | 67% | 😊 | 9 | 4 | 2 | 43% | 😊 | | |
| 46 | GBR | FM | LANDERS | Andrew | | | | | | | | | | P | 0 | 0 | 0 | nc | | 0 | 0 | 0 | nc | | | |
| 47 | HUN | FM | LANG | Zoltan | A | A | A | P | A | P | A | AA | AA | A | 5 | 2 | 2 | 33% | 😊 | 10 | 6 | 2 | 25% | 😞 | | |
| 48 | RUS | FM | LOBACHEVSKY | Yakov | | | | | | | | | | A | 3 | 1 | 2 | 0% | 😞😞 | 3 | 1 | 2 | 0% | 😞😞 | | |
| 49 | BGR | FM | MIHAILOV | Nicolay | P | P | P | P | A | P | P | AA | AA | A | 5 | 1 | 2 | 67% | 😊 | 10 | 2 | 2 | 75% | 😊 | | |
| 50 | ESP | PW | MIRANDA | Antonio | | | | | | PPW | A | AA | AA | PPW | 4 | 1 | 2 | 50% | 😊 | 4 | 1 | 2 | 50% | 😊 | | |
| 51 | # | PW | MODI | Rajes | | | | | | | | | OPW | A | 2 | 1 | 0 | 50% | 😊 | 2 | 1 | 0 | 50% | 😊 | | |
| 52 | ITA | FM | MOLARI | Giovanni | | | | | | P | P | P | AA | AA | A | 5 | 1 | 2 | 67% | 😊 | 6 | 1 | 2 | 75% | 😊 | |
| 53 | ITA | MC | MONARCA | Danilo | | P | P | P | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 8 | 0 | 0 | 100% | 😊😊 | | |
| 54 | # | FM | MPAGALILE | Joseph Jeremia | | | | | | | | | | | 0 | 0 | 0 | nc | | 0 | 0 | 0 | nc | | | |
| 55 | DEU | MC | MUNACK | Axel | P | A | P | A | P | A | P | O | P | P | 5 | 1 | 0 | 80% | 😊😊 | 10 | 3 | 0 | 70% | 😊 | | |
| 56 | NLD | FM | NIEMEIJER | Evert | P | P | A | A | A | A | A | O | AA | P | 5 | 2 | 1 | 50% | 😊 | 10 | 5 | 1 | 44% | 😊 | | |
| 57 | SWE | FM | NILSSON | Eskil | | | | | | G | P | O | O | P | 4 | 0 | 0 | 100% | 😊😊 | 4 | 0 | 0 | 100% | 😊😊 | | |
| 58 | JPN | FM | NOGUCHI | Noboru | P | A | P | A | A | P | A | AA | AA | P | 5 | 1 | 2 | 67% | 😊 | 10 | 4 | 2 | 50% | 😊 | | |
| 59 | ITA | FM | OBERTI | Roberto | A | P | P | P | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 1 | 0 | 90% | 😊😊 | | |
| 60 | @ | FM | O'BRIAN | Charles | | | | | | | | | | A | 0 | 1 | 0 | nc | | 0 | 1 | 0 | nc | | | |
| 61 | JPN | FM | OKAMOTO | Muneharu | | | | | | P | P | A | P | AA | AA | A | 5 | 2 | 2 | 33% | 😊 | 7 | 2 | 2 | 60% | 😊 |
| 62 | DEU | FM | OKSANEN | Timo | | | | | | | | | | | 0 | 0 | 0 | nc | | 0 | 0 | 0 | nc | | | |
| 63 | # | FM | PAPASTAVROU | Stavros | | | | | | G | A | AA | AA | A | 4 | 2 | 2 | 0% | 😞😞 | 4 | 2 | 2 | 0% | 😞😞 | | |
| 64 | PRT | FM | PEREIRA | Luis Santos | A | A | A | P | A | P | A | AA | AA | A | 5 | 2 | 2 | 33% | 😊 | 10 | 6 | 2 | 25% | 😞 | | |
| 65 | ITA | FM | PESSINA | Domenico | P | P | P | P | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 0 | 0 | 100% | 😊😊 | | |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|----|-----------------|------------|---|---|---|---|-----|-----|-----|-----|-----|-----|----|---|---|------|----|----|---|---|------|----|
| 66 | @ | MC | PEZZINI | Marco | P | P | P | P | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 0 | 0 | 100% | 😊😊 |
| 67 | # | FM | PICCAROLO | Pietro | A | P | P | P | A | P | A | O | AA | P | 5 | 1 | 1 | 75% | 😊 | 10 | 3 | 1 | 67% | 😊 |
| 68 | DEU | FM | PICHLMAIER | Benno | | | | | | G | A | AA | P | P | 4 | 1 | 1 | 67% | 😊 | 4 | 1 | 1 | 67% | 😊 |
| 69 | DEU | MC | PICKEL | Peter | P | P | P | P | P | P | P | AA | O | P | 5 | 0 | 1 | 100% | 😊😊 | 10 | 0 | 1 | 100% | 😊😊 |
| 70 | USA | FM | POURREZA | Alireza | | | | | A | A | PPW | AA | PPW | P | 5 | 1 | 1 | 75% | 😊 | 6 | 2 | 1 | 60% | 😊 |
| 71 | @ | FM | PRONIN | Viacheslav | | | | | | | | AA | AA | A | 3 | 1 | 2 | 0% | 😞😞 | 3 | 1 | 2 | 0% | 😞😞 |
| 72 | # | FM | RABÉ | Yahaya | | | | | | | | | | P | 1 | 0 | 0 | 100% | 😊😊 | 1 | 0 | 0 | 100% | 😊😊 |
| 73 | DEU | FM | RAMM | Marco | | | | G | PPW | A | PPW | OPW | PPW | O | 5 | 1 | 0 | 80% | 😊😊 | 6 | 1 | 0 | 83% | 😊😊 |
| 74 | USA | FM | REID | John | P | P | A | P | P | A | P | AA | AA | A | 5 | 2 | 2 | 33% | 😊 | 10 | 3 | 2 | 63% | 😊 |
| 75 | DEU | MC | RENIUS | Karl | P | P | P | P | P | P | P | AA | P | P | 5 | 0 | 1 | 100% | 😊😊 | 10 | 0 | 1 | 100% | 😊😊 |
| 76 | ITA | FM | RIBALDONE | Massimo | A | A | A | A | P | A | A | AA | AA | A | 5 | 3 | 2 | 0% | 😞😞 | 10 | 7 | 2 | 13% | 😞 |
| 77 | NLD | FM | RIJK | Adrianus | A | A | A | A | A | A | A | AA | AA | O | 5 | 2 | 2 | 33% | 😊 | 10 | 7 | 2 | 13% | 😞 |
| 78 | DEU | FM | ROETTELE | Manfred | | | | | | | | | | A | 0 | 1 | 0 | nc | | 0 | 1 | 0 | nc | |
| 79 | ITA | FM | RONDELLI | Valda | P | P | P | P | A | P | P | AA | P | P | 5 | 0 | 1 | 100% | 😊😊 | 10 | 1 | 1 | 89% | 😊😊 |
| 80 | ESP | FM | RUIZ-ALTISENT | Margarita | A | A | A | A | A | A | A | O | O | O | 5 | 2 | 0 | 60% | 😊 | 10 | 7 | 0 | 30% | 😊 |
| 81 | # | FM | SAMARAKOON | Namal | P | P | P | P | A | P | P | O | O | O | 5 | 0 | 0 | 100% | 😊😊 | 10 | 1 | 0 | 90% | 😊😊 |
| 82 | SCG | FM | SAVIN | Lazar | | G | | | | G | P | AA | P | P | 4 | 0 | 1 | 100% | 😊😊 | 4 | 0 | 1 | 100% | 😊😊 |
| 83 | USA | MC | SCHUELLER | John | P | P | P | P | P | P | P | O | O | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 0 | 0 | 100% | 😊😊 |
| 84 | DEU | FM | SCHULZE LAMMERS | Peter | P | P | P | P | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 0 | 0 | 100% | 😊😊 |
| 85 | USA | FM | SHEARER | Scott | A | A | A | P | A | A | A | AA | AA | P | 5 | 2 | 2 | 33% | 😊 | 10 | 6 | 2 | 25% | 😞 |
| 86 | @ | FM | SINGH | Surendra | | | | | P | P | P | O | O | O | 5 | 0 | 0 | 100% | 😊😊 | 6 | 0 | 0 | 100% | 😊😊 |
| 87 | # | MC | SINGH | Gajendra | A | P | P | A | A | P | A | O | O | O | 5 | 1 | 0 | 80% | 😊😊 | 10 | 4 | 0 | 60% | 😊 |
| 88 | JOR | MC | SNOBAR | Bassam | A | P | P | P | P | P | P | O | O | P | 5 | 0 | 0 | 100% | 😊😊 | 10 | 1 | 0 | 90% | 😊😊 |
| 89 | DNK | FM | SØRENSEN | Claus | | | | | | | | O | O | P | 3 | 0 | 0 | 100% | 😊😊 | 3 | 0 | 0 | 100% | 😊😊 |
| 90 | CHE | FM | STIRNIMANN | Roger | | | | | | | | AA | P | P | 3 | 0 | 1 | 100% | 😊😊 | 3 | 0 | 1 | 100% | 😊😊 |
| 91 | DEU | FM | WEGENER | Jens-Karl | | | | | | | | | | P | 0 | 0 | 0 | nc | | 0 | 0 | 0 | nc | |
| 92 | @ | FM | Wieresma | Jelte | | | | | | | | | | | -1 | 0 | 0 | 100% | 😊😊 | -1 | 0 | 0 | 100% | 😊😊 |
| 93 | BEL | FM | SAEYS | Wouter | | | | | | | | | | A | 0 | 1 | 0 | nc | | 0 | 1 | 0 | nc | |
| 94 | JPN | FM | YAMAMOTO | Tsugunori | | | | G | A | A | A | AA | AA | A | 5 | 3 | 2 | 0% | 😞😞 | 6 | 4 | 2 | 0% | 😞😞 |
| 95 | CHN | FM | YANG | Minli | | | | | P | P | | | | O | 5 | 0 | 0 | 100% | 😊😊 | 6 | 0 | 0 | 100% | 😊😊 |
| 96 | FRA | PW | YATSKUL | Andrii | | | | | | PPW | PPW | OPW | PPW | PPW | 4 | 0 | 0 | 100% | 😊😊 | 4 | 0 | 0 | 100% | 😊😊 |
| 97 | # | FM | ZAZUETA | Fedro | A | A | A | P | A | A | A | AA | AA | A | 5 | 3 | 2 | 0% | 😞😞 | 10 | 7 | 2 | 13% | 😞 |
| 98 | USA | PW | ZHANG | Xin | | | | | | | | | OPW | OPW | 2 | 0 | 0 | 100% | 😊😊 | 2 | 0 | 0 | 100% | 😊😊 |
| 99 | USA | FM | ZHANG | Qin | P | P | A | P | A | A | P | AA | AA | P | 5 | 1 | 2 | 67% | 😊 | 10 | 3 | 2 | 63% | 😊 |
| 100 | # | FM | ZHAO | Bing | | | P | A | P | P | P | O | P | P | 5 | 0 | 0 | 100% | 😊😊 | 8 | 1 | 0 | 88% | 😊😊 |

From the above table, the following list of **Individual Member Attendance Index equal to “bad”** (0%) or **“low”** (0-25%) – isolating only Members with at least 5 years of membership - can be extracted (**Table 4**):

Table 4 – Individual Member Attendance Index = “Bad” or “Low” (over the past 5 and 10 yrs)

| N | NAT | T_MEMBER | SURNAME | NAME | 5 YRS ANALYSIS | | | | | 10 YRS ANALYSIS | | | | |
|----|-----|----------|-----------|-----------------|----------------------------|-------------------------|-----------------------------|-----------------------|-----------------------|-----------------------------|--------------------------|-----------------------------|------------------------|------------------------|
| | | | | | Yrs to consider last 5 yrs | ABSENCES (A) last 5 yrs | ABSENCES 2021 meetings (AA) | ATTENDANCE last 5 yrs | ATTENDANCE last 5 yrs | Yrs to consider last 10 yrs | ABSENCES (A) last 10 yrs | ABSENCES 2021 meetings (AA) | ATTENDANCE last 10 yrs | ATTENDANCE last 10 yrs |
| 37 | IND | FM | KESAVAN | Thekkepat Raman | 5 | 3 | 1 | 25% | ☹️ | 9 | 5 | 1 | 38% | ☹️ |
| 42 | JPN | FM | KONDO | Naoshi | 5 | 3 | 2 | 0% | ☹️☹️ | 5 | 3 | 2 | 0% | ☹️☹️ |
| 43 | @ | FM | KORCHEVOY | Evgeniy | 5 | 3 | 2 | 0% | ☹️☹️ | 10 | 8 | 2 | 0% | ☹️☹️ |
| 76 | ITA | FM | RIBALDONE | Massimo | 5 | 3 | 2 | 0% | ☹️☹️ | 10 | 7 | 2 | 13% | ☹️ |
| 94 | JPN | FM | YAMAMOTO | Tsugunori | 5 | 3 | 2 | 0% | ☹️☹️ | 6 | 4 | 2 | 0% | ☹️☹️ |
| 97 | # | FM | ZAZUETA | Fedro | 5 | 3 | 2 | 0% | ☹️☹️ | 10 | 7 | 2 | 13% | ☹️ |

2.2.4 Full Member list updating (30 Nov 2022 – 31 Oct 2023)

2.2.4.1 Full Member cancellation

Unfortunately, during the reference period, **n.1 Member passed away** (June 2023): **Bill Stout** (USA)

Bill Stout, with Professor Giuseppe Pellizzi, in 1989, was a **founder** of the “Club of Bologna”; Bill has always shown great pride in belonging to the Club family, putting at the service of all their huge and international experience in the field of Agricultural Mechanization. We will always remember him with affection and esteem. May his soul rest in peace.

In addition, must be undelined:

- the delegate for CEMA in the CoB (**Gerome Bandry**), was replaced in his position as Secretary General of CEMA from **Jelte Wieresma** (his membership has been approved online MC meeting, April 14)
- n.2 Full Members informed CoB SG about their **intention to abandon the club**
 - ☐ **Volodymyr Kravchuk** (Leonid Phorilyi UkrNDIPVT; UKR): Deputy Director of UkrNDIPVT asked to replace Kravchuk with **Stanislav Kalin** (Leonid Phorilyi UkrNDIPVT; UKR - see New Full Members Proposals)
 - ☐ **Tsugumori Yamamoto** (Yanmar; JPN), Yanmar asked to replace with **Shinya Kawashiri** (Yanmar; JPN Yamamoto - see New Full Members Proposals)

2.2.4.2 Full Member revocation

At the last meeting of MC Members, the President was asked to send a **letter**⁶ to some Members, requesting them to start again the attendance at the annual meetings and, in general, to participate to the the Club activities. About this:

- **Scott Shaerer** and **John Reid** responded positively to the reminder letter by registering at the 32nd Members meeting (their effective presence in Hannover will be anyway verified)

On the contrary:

- **Evgeniy Korchevoy** (ROSAGROMASH; RUS) has not answer to the Low Attendance Letter. Consequently, he can be removed from Club of Bologna Members list.

Taking into account the all the above aspects, in the reference period, **n. 5 names** (Bill Stout, Gerome Bandry, Volodymyr Kravchuk, Tsugumori Yamamoto, Evgeniy Korchevoy) are deleted by the Club of Bologna Members list.

2.2.4.3 Full Member new proposals

Giving the “Internal Rules” (art. 7), the new membership proposals **must be submitted by a Member of the Management Committee** and the CVs of the incoming experts shall be mailed to all the MC members in order to discuss about membership. During the reference period, CoB SG received the following **n.7, new FM proposals**:

| NAT | TYA(*) | NEW MEMBER | AGENCY | PROPOSAL BY | CV |
|-----|--------|-----------------------|--|----------------|---------------------|
| AUS | U&R | Troy Arnold JENSEN | University of Southern Queensland jensentroy@ufl.edu ; troy.jensen@usq.edu.au | John Schueller | YES |
| JAP | AGM | Shinya KAWASHIRI | YANMAR (delegate) shinya_kawashiri@yanmar.com | Marco Pezzini | YES |
| UKR | ORG | Stanislav KHALIN | Leonid Pogorilyi UkrNDIPVT (delegate) ndipvt@ukr.net | Paolo Balsari | YES |
| ZAF | U&R | Linus OPARA | University Stellenbosh opara@sun.ac.za ; unesco.icb.nigeria@gmail.com | Gajendra Singh | YES |
| THA | ORG | Dares KITTIYOPAS | ARDA (delegate) dares.doae@gmail.com | Gajendra Singh | YES |
| KEN | ORG | Saidi S. MKOMWA | ACT-Africa (delegate) saidi.mkomwa@act-africa.org | Gajendra Singh | YES |
| AUS | U&R | Salah SUKKARIEH | University of Sidney (suggested by <i>Josse De Baerdemaeker</i> salah.sukkarieh@sydney.edu.au CV: https://www.sydney.edu.au/engineering/about/our-people/academic-staff/salah-sukkarieh.html) | Paolo Balsar | online |

Note: (*) Type of Agency U&R = University&Research Centre; ORG = Public or Private Organization; AGM = Ag. Machinery Manufacturer; F&A = 23Federation and Association; EDI = Editor/Journalist; CNS = Consultant/Expert

2.2.4.3 Pellizzi Prize 2018 Winner

The Pellizzi Prize Winner 2018:

- **Antonio MIRANDA** (Univ. Córdoba, ESP)
- **Marco GRELLA** (Univ. Torino, ITA)
- **Daeun CHOI** (Univ. Pennsylvania State, USA)

⁶ Letter of Low Attendance (LAL), sent by “Club of Bologna” President on February 7, 2023.

- **Andii YATSKUL** (Univ. La Salle, FRA)

have ended the period of hospitality in the "Club of Bologna" and the Management Committee - based on the participation demonstrated in the past 5 years - must **decide whether to name the winners Full Member or delete them from the list.**

3. Subjects discussed over the year (1989-2023)

From 1989 to the present (2023), during the **32 Members’ Meetings** of the “Club of Bologna” (and at the **Open Meeting of 2015**, on the occasion of EXPO in Milan), **299 Key Note Reports (KNR)** and **Special Lectures (SL)**, were presented within the framework of working **Sessions** and detailed during the following open “**Discussion**”.

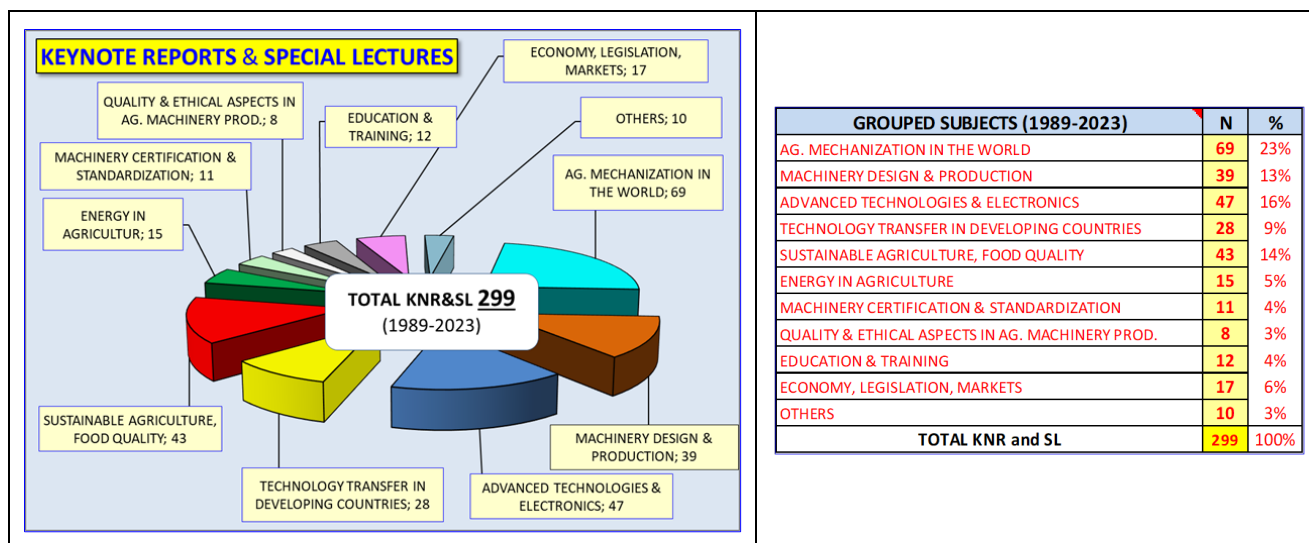
This particular organization of the "Club of Bologna" meetings makes this Club the **only worldwide think-tank** — specifically focused on agricultural mechanization and its evolution in the different **Countries**.

Over a **hundred Authors from all over the world** have been interested in KNRs production.

The great majority of these KNRs have been uploaded to the Club website, grouped by year (<https://www.clubofbologna.org/en/meetings-proceedings.php>). This KNRs’ set, undoubtedly, constitutes **one of the most important free documents collections worldwide related to Agricultural Machinery and Mechanization**.

All these contributions were coded in **11 different categories** (topics) and **Figure 6** shows their distribution.

Figure 6 – Topics grouped into 11 classes. The number indicates the rate covered during the CoB meetings (1988-2023).



The **five top topics** were:

- Agricultural mechanization in the world, 23%
- Advanced technologies & electronics, 16%
- Sustainable agriculture, food quality, 14%
- Machinery design & production, 13%
- Technology transfer in developing countries, 9%.

They give the idea of the capacity that the “Club of Bologna” demonstrated **by addressing - in advance and with far-sightedness - innovative issues, which have subsequently become topical in the sector of world Agricultural Mechanization**.

4. Annexes

4.1 Annex 1 – Management Committee online Meeting (April 14, 2023)

Meeting Agenda

| N. | TIME | SUBJECT |
|----|----------------|--|
| 1 | 2.00 - 2.15 pm | President Communications |
| 2 | 2.15 - 2.30 pm | 32nd CoB FM Meeting organization and draft Agenda 2.1 Present updated version of the Agenda 2.2. Sessions Rapporteurs: proposal and approval |
| 3 | 2.30 - 2.40 pm | MC meeting in presence on 11 November 2023 (Hannover) 3.1 New FM proposals approval 3.2 List of the aspects to be discussed (new MC Members proposal) |
| 4 | 2.40 - 2.45 pm | Update on the social group "CoB" on LinkedIn |
| 5 | 2.45 - 3.00 pm | Any other business |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |

Attending table

| | | | |
|----|-----------------------|-------------------|---|
| 1 | President | Paolo Balsari | Y |
| 2 | Secretary General | Marco Fiala | Y |
| 3 | Federunacoma Delegate | Marco Pezzini | Y |
| 4 | Member | Husseine Bartali | N |
| 5 | Member | Emilio Gil | N |
| 6 | Member | Yoshisuke Kishida | N |
| 7 | Member | Danilo Monarca | Y |
| 8 | Member | Axel Munack | Y |
| 9 | Member | Peter Pickel | N |
| 10 | Member | Karl Renius | Y |
| 11 | Member | John Schueller | Y |
| 12 | Member | Gajendra Singh | Y |
| 13 | Member | Bassam Snobar | Y |
| 14 | Past President | Ettore Gasparetto | N |
| 15 | Past President | Luigi Bodria | N |

Verified the number of those present (9/15), the meeting is **valid**.

The CoB President **declares the meeting open** and assumes the chairmanship of the Management Committee Members' meeting. He appoints CoB Secretary General as the reporting person and then he moves on to explain the points in the agenda.

1 - President communications

President: informs about next CoB activities

- about last 32nd meeting: the reports of Sessions 1, 2 and 3 respectively made by C. Birkmann, A. Yatskul and A. Miranda-Fuentes will be probably published in the next numbers of the «Machinery World MW»

magazine. Secretary General had uploaded all the Session reports on CoB website (<https://www.clubofbologna.org/en/meetings-proceedings.php?ANNO=2022>)

- confirms that the 33rd Members' Meeting: will be held in Bologna at EIMA fair (9-10 November, 2024)
- in 2024 – in addition to the Members' Meeting - the "2024 Pellizzi Prize" will be organized with the same rules of previous editions. He announces that for such an event it will be necessary to convene the Management Committee at least a couple of times to define the winners. The Committee of the Regions would like to see a strong dissemination by the members of the CoB MC and all the FM as well.
- about the CoB Members' Card: actually - despite numerous requests from the Secretary General – 25 of the current 101 Members have never compiled and sent the "Input Form. Not having recent information (or confirmation of the previous one), the "Member Card" of these 25 members will then be reduced and it will include only the Member's basic information (i.e.: name, surname and email).
- finally, announces that Federunacoma organizes for 5-8 Oct 2023 Agrilevante, in Bari (Italy) (<https://www.agrilevante.eu/en/index.php>)

Pezzini: about Agritechica 2023: emphasizes that, after 4 years, the exhibition will see a large participation of people. At the hotel Maritim Federunacoma reserved a limited number of rooms and already now it is impossible to find additional rooms. So, the request to all is to register as soon as possible and activate directly with the hotel for additional nights (if are needed) to those offered by Federunacoma.

President: at the end of the topic of this point of the MC meeting agenda, hear and annotate the comments and observations of the Members of the Management Committee, asks puts to the vote what was discussed and decided. The Management Committee approves unanimously.

2 - 32nd CoB FM Meeting organization and draft Agenda

2.1 Present updated version of the Agenda

President: the first series of communications concern the 32nd CoB Members Meeting. In summary:

- date and location: the meeting will be held in Hannover, on Sunday 12th and Monday 13th November 2023 during Agritechnica 2023 exhibition
- modality: both in presence and online (as the last 31st meeting)
- invitation: an official letter will be sent to all the CoB Members (i.e.: MC, Past Presidents, FM, Pellizzi Prize Winners) before the end of July
- registration and hotel reservation: a special link for filling a "Registration Form" will be sent by email; each participant must fill in the "Registration Form" and send it to Federunacoma. Concerning the entrance to the exhibition area, Agritechica staff will provide all the participants for two tickets. The contact person of DLG that CoB had for the organization of the meeting (Dr. Raffaele Talarico) has changed his activity; therefore, we will have another direct contact (DLG staff: Philippa Van Loe)
- accommodation and bus service: the accommodation (2 nights: 11 and 12 Nov) will be at Maritim Airport Hotel (Hannover). The local public transport service will be used (Airport to Agritechnica and viceversa); n.4 tickets will be provided to each participant.
- the MC Members' meeting: will be held on Saturday 11th November (5.00-7.30 pm, local time) inside a meeting room at Maritim Airport Hotel, both in presence and online mode (to be in person! Is of course «highly" recommended).

Concerning the draft 32nd meeting Agenda:

President: shows to the online participants the last version of the 32nd CoB Members' Meeting Agenda. He explains and details each Agenda Session and the various Speakers, identified with the support of the

Session Chairmen (S1 Monarca, S2 Munack and S3 Schulze-Lammers).

Sunday, November 12 (morning) – Convention Centre Room 15/16

| | |
|--|---|
| h 8.30 | Transfer by train: from Maritim Airport Hotel to AGRITECHNICA (meeting point: hotel hall) |
| h 9.45÷10.15 | OPENING SESSION Welcome addresses by: President of FEDERUNACOMA and CEO of DLG Opening statement by Paolo Balsari President of the “Club of Bologna” |
| SESSION 1 – AGRICULTURAL USED AREA (AUA) DECREASE, WORLD POPULATION INCREASE, CLIMATE CHANGE: ROLE OF MECHANIZATION CHAIRMAN: Danilo Monarca (Club of Bologna Management Committee) – RAPPORTEUR: ... (...) | |
| h 10.15÷10.35 | 1.1 – AUA and world population increase: present and future situation <i>Riccardo Valentini (University La Tuscia - Italy)</i> |
| h 10.35÷10.55 | 1.2 – Climate change additional negative effects <i>Monia Santini (Centro Mediterraneo Cambiamenti Climatici – CMCC Foundation)</i> |
| h 10.55÷11.10 | Coffee break (Foyer Room 15/16) |
| h 11.10÷11.30 | 1.3 – How the reduction of agricultural and food waste contribute to solve the problem <i>Andrea Segré (University of Bologna - Italy)</i> |
| 11.30÷11.50 | 1.4 – The role of agricultural mechanization <i>Emmanuel Hugo (INRAe – France)</i> |
| h 11.50÷12.30 | Session 1 Discussion and Key-Sentences drawing up |
| h 12.30÷13.30 | Lunch (Foyer Kaskaden) |

Sunday, November 12 (afternoon) – Convention Centre Room 15/16

| | |
|--|---|
| SESSION 2 – PREDICTIVE AND LONG DISTANCE MAINTENANCE CHAIRMAN: Axel Munack (Club of Bologna Management Committee) – RAPPORTEUR: ... (...) | |
| h 13.30÷13.50 | 2.1 – Tractors <i>Axel Holtkotte (Claas – Germany)</i> |
| h 13.50÷14.10 | 2.2 – Implements <i>Andrea Ruffin (Maschio-Gaspardo - Italy)</i> |
| h 14.10÷14.30 | 2.3 – Predictive maintenance for large construction machinery: the role of tools forecasting fatigue <i>H. Mariutti (Caterpillar)</i> 2.3 – Components <i>Speaker 2.3 (Bosch, Mueller - Germany) to be defined</i> |
| h 14.30÷14.45 | Coffee break (Foyer Room 15/16) |
| h 14.45÷15.15 | Session 2 Discussion and Key-Sentences drawing up |
| h 15.15÷18.00 | FREE VISIT TO AGRITECHNICA 2023 |
| h 18.30 | Transfer by train: from AGRITECHNICA to the Maritim Airport Hotel |

Monday, November 13 (morning) – Convention Centre Room 15/16

| | |
|--|---|
| h 8.15 | Transfer by train: from Maritim Airport Hotel to AGRITECHNICA (meeting point: hotel hall) |
| SESSION 3 - SPECIFIC MECHANIZATION: MACHINES FOR SUGARBEET AND POTATOES CHAIRMAN: Peter Schulze Lammers (University Bonn – Germany) – RAPPORTEUR: ... (...) | |
| h 9.30÷10.00 | 3.1 – Global sugar beet cultivation, sugar market, sugar companies Ulf Wegener (World Association of Beet and Cane Growers - WABCG) |
| h 10.00÷10.30 | 3.2 – European market, mechanization and postharvest processing of potatoes Rolf Peters (Potato Research Station Munster - Germany) |
| h 10.30÷10.50 | Coffee break (Foyer Room 15/16) |
| h 10.50÷11.10 | 3.3 - Technology and mechanization of potato harvest Rupert Geischeder (ROPA Sittelsdorf – Germany) |
| h 11.10÷11.30 | 3.4 - Technology and mechanization of sugarbeet harvest Michael Gallmeier (HOLMER Schierling/Eggmühl, group EXEL – France) 3.5 – Title Author/s (Grimme Group – Germany) |
| h 11.30÷12.00 | Session 3: Discussion and Key-Sentences drawing up |
| h 12.00÷12.30 | STUDY GROUPS ACTIVITIES - Reports by the SGs Coordinators CLOSING SESSION - Programme of activities for the 2020 |
| h 12.30-13.30 | Lunch (Foyer Room 100) |
| h 13.30 | FREE VISIT TO AGRITECHNICA 2023 |

Munack: on **Session 2**, he announces that it has so far been impossible to find someone on S2.3 "Components", but he will make further attempts with Bosch GmbH experts in next weeks. He will be in contact with the President and Secretary General to improve and close the speeches of the Session 2.

President: on Session 2 asks Marco Pezzini if - as an alternative to Munack's attempts - he can find some Italian manufacturer to be eventually involved

Renius: on Session 2, if Munack and Pezzini's attempts fail, there may be a chance to invite a Fendt speaker

Fiala: on Session 2, asks Munack and Renius, if it is possible to have KNR titles more detailed and the Speakers' emails in order to keep contacts. Renius: considers the title as it is of Report S3.3 by Mariutti (Caterpillar) - already exhaustive.

Schueller: on **Session 3**, proposed to add an US expert on potato market (Keith Tinsey, President ASABE)

President: appreciates this last suggestion and asks John to contact Tinsey and check if he is available to come in person to Hannover, supporting travel expenses. He considers a KNReport presentation more profitable in presence than in remote connection.

Renius: stresses that it would be very important to include Grimme GmbH, who is the world's largest manufacturer of potato harvesting machines. He then suggests to involve Auernhammer because a present Grimme big-expert, was a his PhD student

Concerning the general title for the 32nd meeting:

After a brief comparison between the MC members, the following title is decided: "Agricultural Mechanization: Urgency for Food Security."

President: at the end of the topic of this point of the MC meeting agenda, hear and annotate the comments and observations of the Members of the Management Committee, asks puts to the vote what was discussed and decided. The Management Committee approves unanimously.

2.2. Sessions Rapporteurs: proposal and approval

President: remembers that in the last CoB Members' meetings editions the Pellizzi Prize winners were invites to act as "Session Rapporteur". He remembers also the Rapporteurs are asked to: (i) write – also

considering the Key Sentences written by the meeting participants - a "Session Report" (2-3 pages), to be used by Members to disseminate the CoB activities and conclusions; (ii) improve the Sessions discussion.

President: asks if the MC agrees to continue to involve the past Pellizzi Prize Winners, and then proposes as next Session Rapporteurs: (i) Session 1: Xin Zhang, USA; (ii) Session 2: Rajes Modi, India; Session 3: Hao Gan, USA

Schueller: suggests verifying if Dr. Zhang and Dr. Gan will not have problems with US Immigration Office; therefore proposes in alternative Dana Choi. He will check personally.

President: at the end of the topic of this point of the MC meeting agenda, hear and annotate the comments and observations of the Members of the Management Committee, asks puts to the vote what was discussed and decided. The Management Committee approves unanimously.

3 - MC meeting in presence on 11 November 2023 (Hannover)

President: first of all, invites all MC members to attend the meeting in Hannover, and about the topics to be discussed in the MC meeting of November 11, (5.00-7.30 pm, local time, Maritim Airport Hotel, room still to define), he highlights the following very important points:

- about members to cancel from the CoB FM list: proposes to continue to follow the well-established methodology that excludes inactive FM for at least 5 years
- about new FM, reiterates the opportunity to try to cover most of the world nations, with particular reference to African Countries. About that, he illustrates the current situation: America (North-South): 3 represented Countries (14 Members); Africa: 2 represented Countries (2 Members); Europe (West-East): 2 represented Countries (57 Members); Asia: 5 represented Countries (11 Members). President finally, he recommends to looking for contacts also with important Associations related to agricultural machinery, but also to sector strictly linked with the agriculture. For example:
 - CEETAR: European Organisation of Agricultural, Rural and Forestry Contractors, <https://www.ceettar.eu/>
 - CLIMMAR: Centre de Liaison International des Marchands de Machines Agricoles et Réparateurs, <https://www.climmar.com/>
 - FERTILIZERS EUROPE: <https://www.fertilizerseurope.com/>
 - Organisation for Economic Co-operation and Development (OCDE)
- about the future MC Members (following the decision taken during the MC meeting of October 2021) remembers that the present CoB "Internal Rules" (<https://www.clubofbologna.org/en/internal-rules.php>) set out that the **MC Members** (excluding Past Presidents) **will end their mandate by November 2024**.

Concerning **new FM proposals**:

Schueller: Australia must be represented into the CoB and informs the MC members he will try to check if there is any expert to invite.

Singh: agrees with John (Schueller).

Pezzini: fully agrees on the involvement of all Associations, not only those closely related to agricultural mechanization but also those dealing - more generally - with the agri-food sector, particularly OCDE. He can keep contact with Fertilizers Europe and will report to the CoB President.

President: thanks the members for the effort in widening the Club and asks to send the proposals of new Members to Secretary General (joined by a CV) as soon as possible, so as to discuss them during the next MC meeting in presence to Hannover (Nov 11, 2023).

President: finally informs that, considering the replacement of Jerome Bandry as Secretary General of CEMA with **Jelte Wiersma**, it is necessary to carry on the substitution also into the CoB FM list. Mr. Jelte

Wiersma has sent his CV (which the CoB SG will send to all MC Members together with this report).

President: concerning the Mr. Wiersma appointment (as CEMA delegate), asks to the vote the proposal - presented by Marco Pezzini following the disposals of our "Internal Rules". The Management Committee approves unanimously; consequently, Jelte Wiersma is the new FM of the Club of Bologna and, as such, will be sent an "Official Nomination Letter" and will be invited to the next meeting in Hannover.

Concerning **topics for 33rd CoB Members Meeting:**

President: presents now some preliminary proposals of topics to be discussed in the next meeting (i.e.: 33rd CoB Members' Meeting (Bologna, 2024):

- Session 1: ***The fourth Industrial Revolution, complex systems, and agriculture*** (suggested by FM Fedro Zazueta with possible UNIDO Keynote Speakers)
- Session 2: ***General Open Discussion among the CoB Members about what they look forward for the CoB and which could be the future Members' contribution*** (suggested by MC member Axel Munack; eventually – as alternative solution - in form of evening/after-dinner discussion)
- Session 3: ***Special Mechanization: machinery for hay making*** (suggested by the President, under the Chairmanship of Prof. Fabrizio Mazzetto, University of Bozen - Italy)

after that, he opens the discussion among MC Members.

Renius: considers the President's proposals to be good. He also suggests the topic "*First experiences with field-robots (terrestrial drones)*"

Pezzini: excellent the Karl (Renius) ide. He emphasizes the great relevance and timeliness and asks to pay also attention to the repercussions that the employment of the field-robots will have on the final users and to the level of formation and competences that will be necessary in order to be able to fully use such technology.

About **Session 1:**

Singh: considers the S1 very interesting. However, it should be organised in such a way that the contributions (i.e. Key Note Reports) contain not only theoretical aspects but also practical indications and technological aspects, discussing the repercussions in the different production systems.

Schueller: proposes therefore to mix the proposal presented by Fedro Zazueta with the of Karl's one.

Snoabar: agrees with the proposal of John (Schueller) and suggests therefore to change the title of the S1.

About **Session 2:**

Munack: suggests to address this important topic as "*After-Dinner Discussion*". In this case, however, it will be necessary to organise the round table by defining a specific agenda to be followed in order to optimize the discussion and the results that will emerge.

About **Session 3:**

No remarks or comments.

4 - Update on the social group "CoB" on LinkedIn

President: first, remember that Marco Ramm (Full Member of the Club) proposed to establish a LinkedIn "CoB Group", by which disseminate the Club activities and news. The same Marco Ramm declared his availability to coordinate this group on this well-known social platform.

President: informs that a meeting has recently been held with Federunacoma - in particular with Patrizia Menicucci who takes care of the communication aspects related to the CoB - to discuss specifically this interesting and innovative communication tool. During this meeting specific technical aspects emerged; the main ones were:

- *Which are the content and the aims of the CoB LinkedIn group: will it be a reserved space on which each CoB FM will be able to freely upload news and information that they consider to be of interest to the CoB community, eg local events, commercial information, etc.? or will it be an open-space devoted to agricultural mechanization?*
- *Who – in addition to Federunacoma who will be responsible for the LinkedIn profile - filters and control the information?*
- *Who can follow this LinkedIn CoB Group? only CoB FM through the CoB Member Card? or anyone who subscribes to the profile?)*

President: adds that Federunacoma is very interested in developing the project, identifying Marco Ramm as administrator of the profile. Naturally Federunacoma wants to play the role of “project coordinator”, controlling the information conveyed and the modalities of use of the profile; in this sense it is essential to identify and carefully define the management criteria.

Schueller: judges the LinkedIn CoB project an excellent opportunity to expand the knowledge of CoB.

President: proposes that the project continue with the direct involvement of Federunacoma (Patrizia Menicucci) and for CoB the Coordinator of the Study Group "Activities Dissemination" (Danilo Monarca). For this aim proposes to contact Marco Ramm organizing an online meeting to start discussing. He invites the General Secretary to organize this first operational meeting.

President: at the end of the topic of this point of the MC meeting agenda, hear and annotate the comments and observations of the Members of the Management Committee, asks puts to the vote what was discussed and decided. The Management Committee approves unanimously.

5 - Any other business

As there is no request from the attending MC Members, the President Paolo Balsari, thanks the participants, giving them an appointment at the next meeting that will be held, in presence, in Hannover (11 November 2023; a specific communication with all the necessary documentation for the discussion of the items on the agenda will be sent by the Secretary General) and declares closed this MC Members work session.

Marco Fiala (CoB Secretary General)

14 April 2023

Minutes were sent to all MC Members on 18 May 2023. No comments have been received.

CLUB *OF* BOLOGNA

strategies for the development of agricultural mechanisation

<http://www.clubofbologna.org/>

32nd Annual Meeting of the Club of Bologna

“Agricultural Mechanization: Urgency for Food Security”

November 12-13, 2023

AGRITECHNICA 2023 – Hannover, GERMANY

[\(https://www.agritechnica.com/de/\)](https://www.agritechnica.com/de/)

CONVENTION CENTRE

Room 15/16

AGENDA

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Sunday, Nov 12 - Convention Centre, Room 15/16

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| h 8.30 | Transfer by train from Maritim Airport Hotel to AGRITECHNICA (meeting point: hotel hall) |
| h 9.45÷10.15 | WELCOME ADDRESSES AND OPENING SESSION Maria Teresa Maschio (FEDERUNACOMA President), Lothar Hövelmann (DLG Managing Director) Opening statement by Paolo Balsari President of the "Club of Bologna" |
| SESSION 1 – AGRICULTURAL USED AREA (AUA) DECREASE, WORLD POPULATION INCREASE, CLIMATE CHANGE: ROLE OF MECHANIZATION CHAIRMAN: Danilo Monarca (Club of Bologna Management Committee) – RAPPORTEUR: Alireza Pourreza | |
| h 10.15÷10.35 | 1.1 – AUA and world population increase: present and future situation Riccardo Valentini (University La Tuscia - Italy) |
| h 10.35÷10.55 | 1.2 – Climate change and agriculture: from challenges to solutions Monia Santini (Centro Mediterraneo Cambiamenti Climatici – CMCC Foundation) |
| h 10.55÷11.10 | Coffee break (Foyer Room 15/16) |
| h 11.10÷11.30 | 1.3 – Food-waste, food-loss and new bio-economy models to solve the problem Gianluca Brunori (University of Pisa - Italy) |
| 11.30÷11.50 | 1.4 – Agricultural mechanization, one of the solutions making it possible to reconcile the scarcity of agricultural land, a decline in the number of farmers and an increase in the world population in a context of climate change Emmanuel Hugo (INRAe – France) |
| h 11.50÷12.30 | Session 1 Discussion and Key-Sentences drawing up |
| h 12.30÷13.30 | Lunch (Foyer Kaskaden) |
| SESSION 2 – PREDICTIVE AND LONG DISTANCE MAINTENANCE CHAIRMAN: Axel Munack (Club of Bologna Management Committee) – RAPPORTEUR: Dana Choi | |
| h 13.30÷13.50 | 2.1 – Soil tillage: predictive maintenance in the Agritech world Andrea Ruffin (Maschio-Gaspardo - Italy) |
| h 13.50÷14.10 | 2.2 – Combined physical and AI-based predictive maintenance for components Walter Lehle (Robert Bosch - Germany) |
| h 14.10÷14.30 | 2.3 – The human factor in a data-driven service process: Support vs. supervision for CLAAS tractors Axel Holtkotte (Claas GmbH– Germany) |
| h 14.30÷14.45 | Coffee break (Foyer Room 15/16) |
| h 14.45÷15.25 | Session 2 Discussion and Key-Sentences drawing up |
| h 15.25÷18.00 | FREE VISIT TO AGRITECHNICA 2023 |
| h 18.30 | Transfer by train: from AGRITECHNICA to the Maritim Airport Hotel |

Monday, Nov 13 - Convention Centre, Room 15/16

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| h 8.15 | Transfer by train from hotel to AGRITECHNICA (meeting point: hotel hall) |
| SESSION 3 - SPECIFIC MECHANIZATION: MACHINES FOR SUGAR BEET AND POTATO CHAIRMAN: Peter Schulze Lammers (University Bonn – Germany) – RAPPORTEUR: Hao Gan | |
| h 9.45÷10.05 | 3.1 – Global sugar beet cultivation, sugar market, sugar companies Ulf Wegener (World Association of Beet and Cane Growers - WABCG) |
| h 10.05÷10.25 | 3.2 – European market, mechanization and postharvest processing of potatoes Rolf Peters (Potato Research Station Munster - Germany) |
| h 10.25÷10.40 | Coffee break (Foyer Room 15/16) |
| h 10.40÷11.00 | 3.3 - Harvest quality, soil conservation and costs in the potato harvesting - where is the journey heading? Potato harvest trends Rupert Geischeder (ROPA Sittelsdorf – Germany) |
| h 11.00÷11.20 | 3.4 - Technology and mechanization of sugar beet harvest Michael Gallmeier (HOLMER Schierling/Eggmühl, group EXEL – France) |
| h 11.20÷11.50 | Session 3: Discussion and Key-Sentences drawing up |
| h 11.50÷12.50 | STUDY GROUPS (SG) ACTIVITIES - Reports by the SG Coordinators SG1 Sustainable agricultural mechanization in Africa - Global Conference on Sustainable Agricultural Mechanization - Brief Review - J. DeBaerdemaeker; J. Kienzle SG2 Dissemination – D. Monarca SG3 Ethics of the future agricultural mechanization development - Focus on the new EU AI Act (AIA) - P. Pickel SG4 Evaluation of the incentives for the improvement of the agricultural mechanization in the world - E. Hugo Short Communication: India's vision on Agri Technology – TR Kesavan CLOSING SESSION - Programme of CoB activities for the 2024 |
| h 12.50-13.30 | Lunch (Foyer Room 100 - downstairs) |
| h 13.30 | FREE VISIT TO AGRITECHNICA 2023 |

The “Club of Bologna”

"A permanent observatory for the study, analysis and in-depth analysis of the issue of agricultural mechanization at a global level in order to define possible development and evolution strategies according to the current and future needs of the various Countries."

[Giuseppe Pellizzi]

Milan, October 31st, 2023

Marco Fiala – Secretary General of the “Club of Bologna” (marco.fiala@unimi.it)

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