

USER GUIDE FOR DICOOP.APP

version November 2022.

To use the DICOOP application (<https://dicoop.app/>), the first step is to establish the list of members who will be likely to be evaluated and/or to make evaluations.

1/ **Participants** tab (bottom left)

- **Add a participant**
- A participant form opens for which you have to fill in the indicated fields
 - At any time, you can and will be able to modify the elements entered in each participant form, add or delete a participant. Nevertheless, your list is only saved locally (i.e. on your computer) during the input. In order not to lose your data from one use to another or from one computer to another, it is important to export your list with the black "**export**" button on the left of the screen at the end of the input. You will be able to re-import the exported list so that you do not have to re-enter all the participants the next time you use it.
 - The data to be entered are free text fields. It is important to reuse from one participant to another the same way of writing a skill, a place, an availability, ...for that, once entered a first time in a form, you will be able to reuse the same terms without rewriting them in the drop-down lists that are created as you go
- Enter the **Name** (mandatory). Be careful it must be unique in the list so that the app can identify the individual, so for homonyms, you must distinguish them by adding a singularity.
- Indicate the **Type** (required): if it is a pro, a non-pro, or an external person
 - A pro will not necessarily be evaluated, it will have to be specified in the form
 - A non-pro and an external can evaluate but will never be evaluated
- Specifying a **Location** (optional), allows to take into account the distances to be travelled for the evaluators, with a minimum to be travelled (to avoid evaluations in the same village or area for example) or a maximum to be travelled (to spread the distances travelled fairly or to avoid too far travels that could exceed the round trip in the day if it is agreed so)
 - It can be a full name of a town or village
 - An area name named by A, B, C, D, etc.
 - An area name characterized by North, East, South, West, Central
 - *In a distance matrix (**Distance** tab), it will then be necessary to specify between each location the chosen distance*.*
- Indicate the **Competences** of the person (optional), allows to assign this person as a competent evaluator for the evaluation of other persons according to these competences
 - It can be competence in a given activity broadly (agroecology) or more specifically (vegetable farming)
 - It can be a level of technical competence (e.g. very experienced, moderately experienced, low experience, no experience)

- o It may be an evaluation skill (e.g. very experienced, moderately experienced, low experience, no experience)
- o It may be a reading and writing skill
- o It can also be added in this item if the person has some equipment such as a car to get around.
- o It can be a language(s) spoken by the person when we want that at least one evaluator speaking the same language as the evaluated person
- Indicate **Availability** (optional) to attend a commission knowing that the appraisee and at least two appraisers will be present. This is to take into account the attendance or weekly/seasonal working schedule of the participants
 - o This may be availability in days of the week, months, or seasons
- /for pro/ indicate the **Skills required** (optional) for the person to be evaluated. This allows you to assign an evaluator(s) to this person who necessarily has the required skill(s) for the evaluation (competence in a given activity, technical experience, evaluation skill, language, etc.).
- Specify **Vets** (optional)
 - o Put the name of person with whom the person has a past conflict or conflict of interest (same family, competing, etc.). Choose from the drop-down list (or write the name of the person in question in exactly the same way).
 - o The vetoes step can be done after the whole list of participants is entered, allowing to add vetoes only on specific cases by using the drop-down list and checking that the veto is entered reciprocally on both persons concerned
- /for pro/ indicate if the person **Needs evaluation** (mandatory), by default the person is evaluated, but in some cases, the evaluation is not required every year for example (nevertheless the person will participate in the evaluation of the other persons)
- Indicate the **maximum number of inspections** (optional), by default this number will be the one indicated in the settings of the evaluation modalities (main window of the app at the top), but it allows to take into account personal cases, for example if it is not required that a non-evaluated pro evaluates in turn, or if non-pros do not wish to engage at the same level as what is recommended in the organisation in the usual way.
- **Register the participant**
 - o Use “**delete**” to delete a participant (if, for example, he/she no longer wishes to participate, or when using the list from previous years and a participant has left the group)
 - o Use “**cancel**” to cancel an entry (if you have modified the criteria of the participants and you do not want to save them)

As you go along, you will see the list appear in the main window of the app.

The second step is to fill in the distance matrix (optional if you don't want to take the distances into account)

2/ **Distance** tab (bottom left)

This step is a bit laborious because you have to fill in the distance between two points.

You can make this step easier by putting approximate orders of magnitude (10, 20, 30, etc.) or "steps" (from the centre to the west I take 1 step, from the centre to the centre I take 0 steps, from the west to the south I take 2 steps, etc.).

Filling in the matrix means entering the value between two points twice (between a and b; between b and a)

The **History** and **Solution** tabs do not need to be filled in, the application gives the results.

The third step is to set the common parameters for the evaluations, i.e. the way the evaluation teams are composed (annual rotation of the teams and in some cases if a follow-up is needed, the taking into account of the availability) and the number of evaluations required by the participants.

3/ In the main window of the application (top)

- Indicate the **number of professional participants** required in an evaluation team (exact number, or minimum and maximum)
- and the **number of assignments per professional participant**, i.e. how many evaluations each professional should perform (exact number, or minimum and maximum)
- Indicate the **number of non-professional participants** (optional) required in an evaluation team (exact number, or minimum and maximum)
- and the **number of assignments per non-professional participant**, i.e. how many evaluations each non-professional person should complete (exact number, or minimum and maximum)
- Indicate the **number of external participants** (optional) required in an evaluation team (exact number, or minimum and maximum)
- and the **number of assignments per external participant** i.e. how many evaluations each external should perform (exact number, or minimum and maximum)

Pay attention to the consistency of the teams. If it is required that each pro does 2 evaluations but in an evaluation team there is only one pro, there will be no solution because there will not be enough space in the teams for the pros to do what is required of them. It is coherent to require as many pros in a team as the pros have to achieve in terms of evaluation.

Be careful to be consistent with the list of participants. For example, if the non-professionals can do 1 to 3 evaluations, and the teams are necessarily composed of a non-professional but there are four times less of them than the pros, there will be no solution because the non-professionals are not numerous enough to ensure that the teams are always complete.

- Indicate the **number of rotations to re-inspect a participant**, indicating the number of years the evaluator will not return to see the evaluated (the higher the number, the more it avoids the tacit agreements that may exist between participants and the more there will be knowledge exchange between people who do not already know each other)
- Indicate the **number of inspectors following up** (optional), this is if it is desired that an evaluator remains the same two years in a row to see the evolution of the person being evaluated. In any case, she should not follow up more than two years in a row)

- Indicate **traveling distance range** (optional). This allows to take into account the distances to be travelled by the evaluators, and to associate a **minimum** (to avoid evaluations in the same village or area for example) and/or a **maximum** (to distribute fairly the distances travelled or to avoid too far travels which could exceed the round trip in the day if it is agreed so)

Only if the participants' locations are indicated in the participants' list and if the distance matrix is completed

- Indicate the **number of files evaluated per evaluation committee**, at a **minimum** so that the participants meet as few times as possible to evaluate all the participants' files and at a **maximum** so that the committee days are limited in duration.
- Indicate if you wish to **use the availability** of participants to organise the days of the commissions knowing that the inspected and at least two inspectors will be present.
- Indicate whether you want to **shuffle the participants randomly** and not according to the order of entry in the list. This means that the "solve" button will never give you the same solution.

The fourth step is the solution search

4/ **Solve** button

Calculations can be complex and get more complex every year. This application offers two different solvers with different computing power. By default it is set to "Optaplanner" but you can choose "Clingo".

Especially if the first one does not give a solution or satisfactory solutions, you can test the second one.

The resolution **status** indicates with scores the current or achieved resolution.

The fifth step is to save your list, your settings and your solution.

5/ **Export** button

All the elements of the application are exported in an Excel document in the download folder of your computer.

Do not forget to rename it with the year or version of use and save it in your folders.

You should not modify this Excel document a priori. It can be used to create a table with the solution of the organisation of the evaluations to all participants.

If, however, in reality the evaluations were not carried out exactly as planned, you can then modify the **Solution** tab of the Excel file, but always by "copying and pasting" the names of the people who actually carried out the evaluations. If you enter the changes by hand, there is a great risk of typing errors that the application would not be able to read.

The sixth step takes place the second time the app is used, usually the following year.

6/ **Import** button

On a second use, in order to reuse the list of participants and to take into account the previous solution, import your Excel document from the application. The set of participants and the setting parameters will reappear. You can modify them as you wish. Add or remove participants.

In the **History** tab, the solution of the past year or even previous years will appear.