



# Outlook and guide to indicator application



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# We need monitoring urgently

- Because biodiversity is a resource for the future
- Because we have to fight the biodiversity decline
- Because agriculture is both one of the most important pressure on biodiversity and a guarantee to maintain biodiversity through high nature value farmland
- Because we have to maintain ecological services
- Because the agricultural production is linked to these biodiversity services as pollination

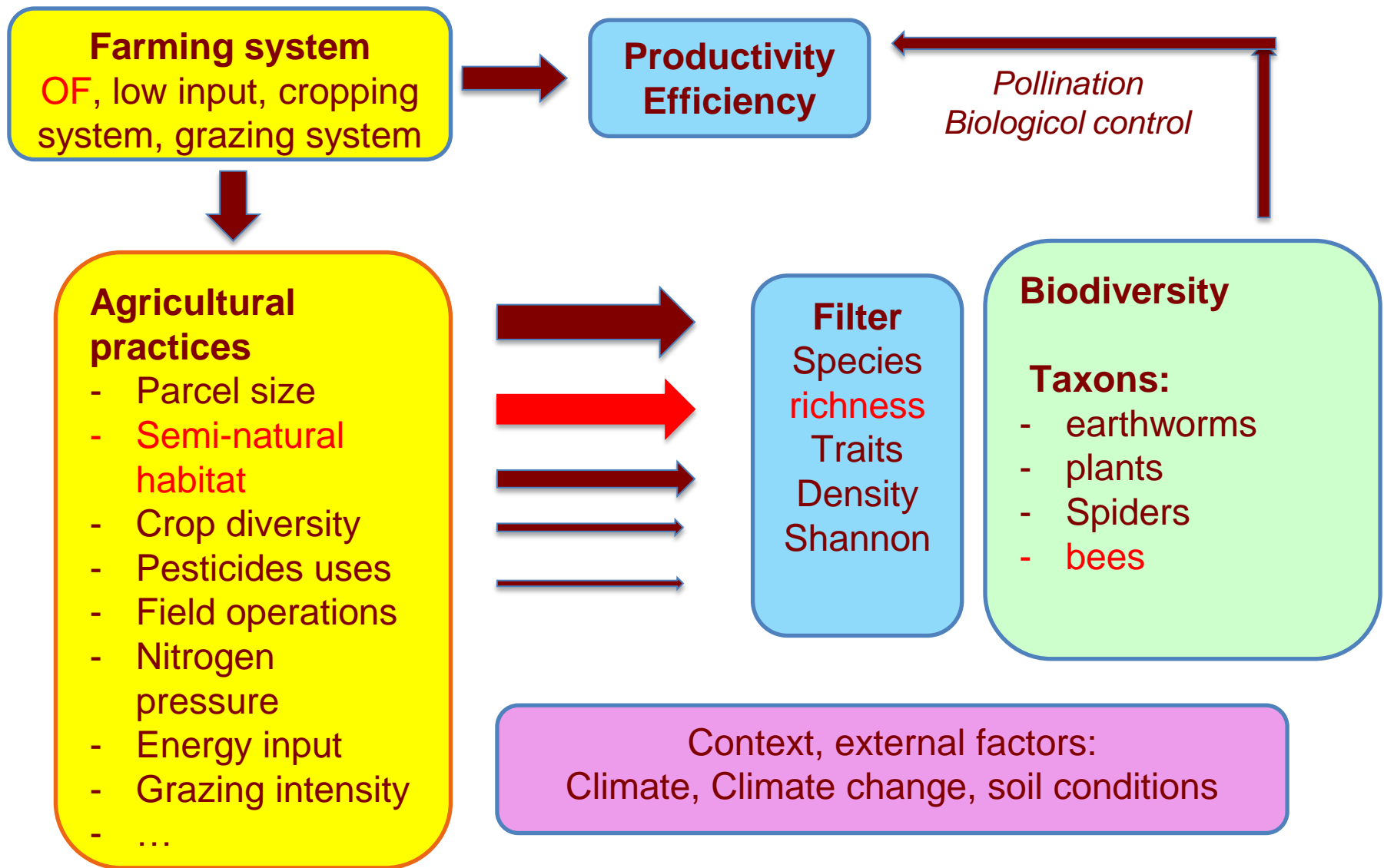


# Different objectives

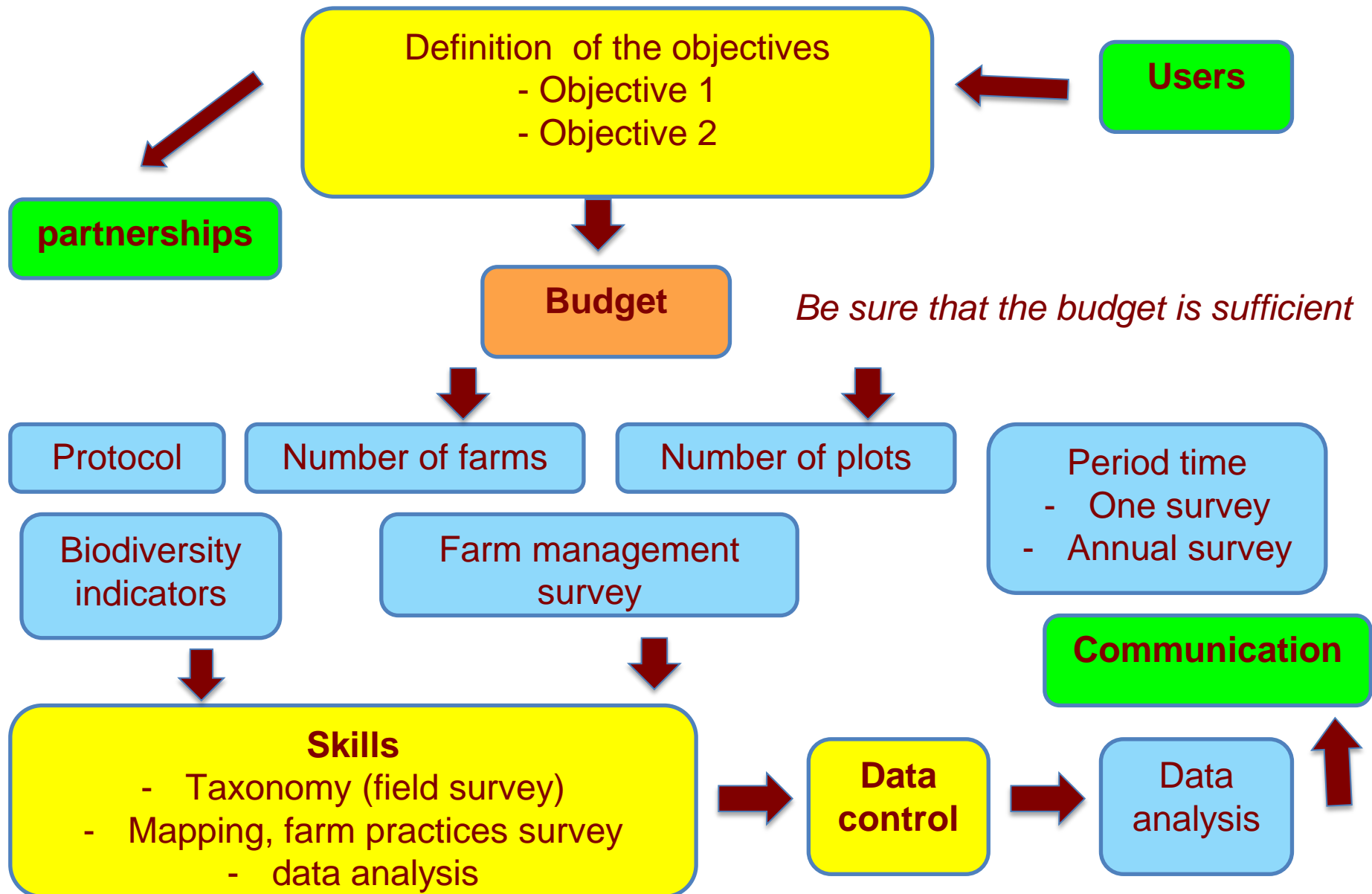
- Encourage farmers towards protecting biodiversity
- Assess the management and the performance of agricultural production (intensive and low input)
- Prove that so-called sustainable practices or farming systems are really beneficial to biodiversity
- Promote sustainable practices through labels and certification
- Assess & optimize agricultural policies towards better protection of biodiversity (cross-compliance, green payments, AEM)
- Raise awareness of public & stakeholders
- Early warnings of environmental changes



# I have a dream : a clear relation between agricultural practices and biodiversity



# Means and skills : a professionalization





# Take into account existing national biodiversity observatories



- **The UK Countryside Survey** has been carried out at intervals since 1978 with the latest in 2007 and provides scientifically reliable evidence about many aspects of the state of the UK countryside as species richness of plants
- The **farmland bird indicator** implemented through all Europe since 1989
- The **French National Monitoring of Hay Meadows** has been implemented since 2001 to monitor populations of breeding grassland birds and plant species diversity
- The **Swiss biodiversity** monitoring scheme was set up in 2001 and implement every 5 years. Different taxons are recorded (birds, plants and butterflies)
- And others

# 1 - The offensive strategy

- Means comparable to water quality or air quality assessment
- 1% of the budget allocated to green payments and agro-environmental measures
- One of the mission of the agronomic research and the environmental agencies
- Robust and standardized protocols
- Monitoring and multi objectives
- Different taxons representative of the biodiversity
- Sufficient number (stratification) of farms and plots
- Made by professionals
- Long time period (30 years) , frequency every 2 or 5 years
- Linked with agricultural surveys or pilot farms
- Strong results : trends, impact of climate change, references



## 2 : The low cost strategy

- Base on a unique objective
- Based mainly on indirect indicators (agricultural practices, semi-natural habitats)
- But that means you know before the relation between farm practices and biodiversity
- Or a short list of species (indicative and easy to identify)
- But that means you have to build this list before
- On a volunteer base
- Mainly: awareness
- No possibility to have a clear trend





# Agri- agroenvironmental measure

## Flowering grassland



1 - Populage des Marais



7 - Succise des prés



13 - Œillet des Chartreux



19 - Géranium des bois



2 - Cirse des ruisseaux



8 - Sauge des prés



14 - Knautie des champs



20 - Lychnis fleur de coucou



3 - Orchidées



9 - Salsifis des prés



15 - Marguerite



21 - Raiponce orbiculaire



4 - Œillet superbe



10 - Renouée bistorte



16 - Lotier corniculé



22 - Rhinanthus



5 - Molinie bleue



11 - Trolle d'Europe



17 - Sainfoin



23 - Campanules



6 - Narcisse



12 - Pimprenelles



18 - Euphorbe verruqueuse





# Intermediate strategy

- reduce the number of plots
- reduce the number of inventories
- reduce the number of habitats
- reduce the number of taxons



SO

- Be opportunist
- Be optimistic
- Be convincing
- Persistence





**Good luck !**