Sustainable strategies for the improvement of seriously degraded agricultural areas: The example of Pistachia vera L.

QUESTIONNAIRE

1. You are considered as a producer being the land owner, a sub-contracted farmer, a tenant, under other status? (please, define if necessary)

____________________________________________________________________

2. How many acres do you cultivate and with what coverage? (i.e. trees per acre)

____________________________________________________________________

3. What do you produce and in what quantities? (in average per year)

____________________________________________________________________

4. A history of land use is available (other cultivations, farming methods, different land use etc prior to the current situation)
   ○ Yes, to a great extend
   ○ Yes, more or less
   ○ Hardly or not at all

5. The ranch occupies ground previously used as landfill or any type of waste disposal
   ○ No
   ○ I do not know
   ○ Yes (please define)

____________________________________________________________________

6. Records of irrigation water usage are maintained and available for review (sources, quantities, quality)
   ○ Yes
   ○ Not all data are available
   ○ No

7. The following irrigation water sources are used:
   ○ Ground water pumped from wells (private drillings)
   ○ Ground water pumped from municipal wells or wells belonging to other authorities, associations etc
   ○ Available open sources (rivers, fountains, naturally occurring ponds etc)
   ○ Tertiary or “gray” water from water treatment plants
   ○ On-ranch reservoirs
   ○ Potable municipal water
   ○ Wastewater rich in organic matter (i.e. dairy lagoon water)
   ○ Other (please define)
8. Annual tests on irrigation water quality are available? If so, which parameters are recorded?
____________________________________________________________________________________
____________________________________________________________________________________

9. Do you possess a husking machine? ____________________________________________________

10. Describe briefly the use of fertilizers and/or other soil supplements (suppliers, types of products, quantities, fertilization periods, application methods).
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

11. Fertilization and application of soil supplements is carried out following guidelines by an agriculturist (or other certified medium) after soil analysis or in an empirical way; __________________________________________________________

12. Do you use fertilizers under to tree canopy or you disperse them on the entire field?
____________________________________________________________________________________

13. Do you use animal manure as a soil supplement or source of nutrients?
   - No
   - If yes:
     - Please describe (type, quantity, application periods)
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________
     - Has a risk assessment of manure usage been conducted?
____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

14. Do you use composts or other waste treatment products as soil supplements?
____________________________________________________________________________________

____________________________________________________________________________________
15. Do you compost or make profitable use of your production wastes in any other way? If yes, please define in which way and describe in brief the methodology applied.

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

16. All pesticides used are certified and permitted by the relevant authorities?
   o Yes
   o I do not know / not sure
   o No

17. Harvest is conducted by mechanical means and without human contact?

______________________________________________________________________

18. Harvest bins are thoroughly washed before use?

______________________________________________________________________

19. Nuts that come in contact with the ground are recovered?

______________________________________________________________________

20. Has an aflatoxin problem been recorded in your yield during the last ten years?
   What precaution measures do you take against aflatoxins?

______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________

21. Are you familiarized enough with computers so as to
   o Make elementary use of accounting workbooks (i.e. excel)
   o Make elementary use of text editors (i.e. Word)
   o Surf in the internet

22. Are you willing to provide in an annual base the data available for your cultivated land (i.e. soil properties, yield) in a network to which authorities will have access in order to analyze and evaluate all available data?

______________________________________________________________________

23. Would you rather insert the data to the network yourself or have an agriculturist do it for you?

______________________________________________________________________
24. Would you find useful the construction and free use of a network application in which instructions concerning cultivation and fertilization would be available by simply inserting the coordinates of a ranch?

______________________________________________________________________

25. Which ones of the following do you consider as absolutely necessary preconditions in order to invest in new practices that primarily intend to protect the environment of Aegina rather than increase yield?
   o Technical and/or economical support by authorities
   o Guaranteed depreciation
   o Guarantee that crop yield will not deteriorate
   o Guarantee that environmental benefits will be remarkable
   o Enforcement by the Law
   o General acceptability (by authorities, association, local society etc)

26. Taking into account your current financial status and general economics, which is the approximate amount of money you could put by yourself (not including bank loans, extra funds etc) as capital cost in a secure investment (with a guarantee of return of the capital cost plus extra financial benefits)?
   o No more than 1000 €
   o 1000 – 3000 €
   o 3000 – 10000 €
   o More than 10000 €

**Personal data** (optional)

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