General summary of BMPs issues for consideration in WP6

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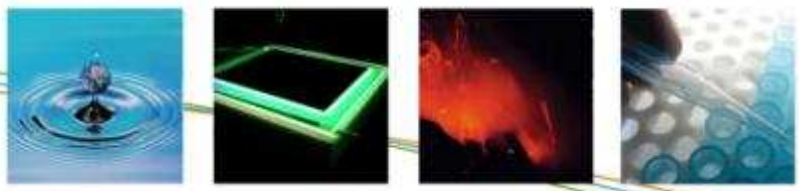

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This report is the final of a series of works that have been undertaken in the framework of work package 4 – Best Management Practices and aims at providing a summary of findings from the seven action labs that are worth to be addressed at European level. Having in mind that the project was performed only within seven pilot areas located only in 7 out of 28 EU member states, it shall not be stated that these findings and conclusions are representative for the entire EU farming catchments. For this reason our observations and final remarks have been formulated in a form of questions, for which a reflection is advised and hoped for when formulating future changes to the EU regulations aimed at water-agriculture/food nexus.

The general aim of the work package 4 was to review and evaluate current farming systems as well as develop strategies that optimise the delivery of good water quality within the case study areas, taking into account cost-effectiveness of management practices. This work was the subject of initial 4 reports presented in work package 4 focused on identifying practical solutions that will be feasible and realistic to implement at action lab level during the course of the project or after. In order to address that, a good understanding of two things was required. First of all how action lab systems function, what are their physical characteristics and dynamics, land use and pressures. This was developed throughout work packages WP3 – Participatory Monitoring and WP5 – Collaborative tool. In these two work packages works were undertaken to understand what are main drivers for water pollution at action lab level and how catchments respond to these drivers. This precise knowledge was required in order to identify areas that are most important from the view of protecting water resources, that is either vulnerable to pollution transfer or exposed to pressures, and these areas were further considered as those that should be tackled when developing strategies to realise the improved up take of mitigation measures and BMPs in deliverable 4.4. The second important factor was information about what measures and best management practices towards protection of water resources from agricultural pressures are already implemented within the catchment and what are steering mechanisms of these, such as governance structure and incentive measures. Apart from what is actually implemented, information was gathered regarding farmers preferences and needs with respect to further implementation of measures. This was analysed in work packages WP4 – Best management practices and WP2 – Water governance.

Throughout this work it became apparent that many **actions,** although designed and needed to be taken at local scales, **require changes in regulations or organisation at higher than a local level**. The structure of river basin management, although correct in its basic assumptions, requires management at river basin level and this most often defines the organisational structure of institutions responsible for implementation and execution of legislations. It has been noted in this project that such an approach may lead to loss of many aspects important at local scales as well as cause difficulties with access to data and delay in decision making process. This further may cause **programmes of actions/measures to be often too general to address issues at local levels and are**

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not applicable in practice. This causes management not effective as actions may be taken not there, where they are needed. The following issues shall be reflected on:

A. Is the river basin planning allowing for correct identification of problems at a catchment scale?
B. Are monitoring programmes not too generic if designed at a water body level?
C. Are implementing regulations efficient at national and regional/local scales?
D. Is the regulation developed at national scales applicable in practice at local level?

Another important issue raised throughout this work was **multiplicity of regulations and lack of coherence between various policy areas**. The fact is that many policy regulations aim at the same – protection of water, however through various means, different governmental departments and subsequently many regional/local institutions. Consequently common goals become unclear, are not efficiently achieved or are not achieved at all. It seems important that structures at local levels are more linked together, and are more integrated and coherent using available resources and financial tools in a complementary way. Access to data regarding local conditions and information sharing is the key for effective management and hence shall be provided in one common database to which all departments/departmental institutions shall have an access to. In general, it should be obligatory for public data to be easily accessible via ICT tools, not only available at request which often delays decision processes. The following issues shall be reflected on:

E. Shall the regulations at EU level be more coordinated and interdisciplinary and be working for a common goal?
F. Would regulation, organisation of works and data exchange at local scales be more effective if governmental departments were aggregated into more interdisciplinary departments?
G. Shall there be more regulations that require data sharing and obligation for public data to be available not on a request but easily accessible via ICT tools for all stakeholders?

The last question relates also to an important sociological observation regarding awareness rising. **The inclusion of society in decision making process can be very beneficial for the effectiveness of actions.** Farmers and stakeholders from our action labs who actively participated in the WaterProtect project were more open for discussions and more willing to take actions since they were aware of the problem, which was not the case before we started Waterprotect. It is essential to encourage the farmers to take actions. Local institutions need to develop better relations with local societies and the first and **most important action is dissemination of monitoring results and raising awareness about environmental problems in surrounding area**. With respect to this, apart from question G, the following issue shall be reflected on:

H. Can the EU regulations stronger induce the requirement for stakeholder participation and awareness raising with local stakeholders such as farmers in environmental protection?
I. Shall information about quality of the local environmental be compulsorily distributed among citizens/stakeholders?

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J. Can the monitoring network be fine-tuned aiming to be used for raising local awareness?

Strengthening the control mechanisms is absolutely required. This is not to punish those who do not follow the rules, but rather to acknowledge farmers who follow legislations and eco-friendly protocols, which will encourage these farmers to continue these good practices. It is recognised that in a large community there will be farmers that for some reasons will not comply with regulations. This however has to be in a minority if changes are anticipated to happen. For that reason, control mechanisms have to be sufficient enough to be able to identify and monitor these farmers who are less willing to participate in the processes towards transition to more sustainable agriculture. With respect to this, the following issue shall be reflected on:

K. Shall the EU regulations regarding control mechanisms be stricter or shall they require a higher number of controls to be performed?
L. Can the EU think about a reward system for farmers who are committed and take measures for water protection to stimulate them to continue (eg. less or less striker controls if farmers have already proven to do right things)?

In contrary to strengthening the control mechanisms, **more help from governments is needed with respect to cost sharing of implementation of measures** f.e. giving funding for environmental measures. This specifically refers to expensive and more complex measures such as e.g. purification systems. Solutions based on cooperation between farmers and local governments would be favourable as these would not only share costs but could also inspire other farmers to participate in the process. With respect to this, the following issue shall be reflected on:

M. Shall the EU regulations ensure more resources for measures that require cooperation between farmers and collaboration between farmers and local governments?

The success of local actions is more likely to sustain when common drivers for sustainable water management exist. As an example the action lab from Italy can be taken, where farmers face the situation of water pollution that is threating their grape production. There is only one source of water and it is in their common interest to protect this resource, which drives efforts of all farmers in the catchment. Often such a strong driver does not sufficiently exist, and then it is more difficult to get the farmers to unite and do the right thing. Drivers for change can have various forms. They can be for example economic drivers organised either at EU level (via compensations in the new Common Agricultural Policy), at regional levels (i.e. joint action plans with water boards, regional stakeholders and a leading/coordinating partner), or in the value chain (via price compensation schemes when farmers are compensated by their clients when having the right approaches implemented). They can be social drivers like a local leader, precursor that with its own actions inspires others and drives the change at a local scale or other drivers like information about water quality that is delivered to farmers directly. With respect to these, the following issues shall be reflected on:

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N. Can the EU support economic drivers that would reward farmers for sustainable production (eg. via compensations in the new Common Agricultural Policy)?
O. Can the EU work on certification systems for food production based on environmental footprint assessment, which will help to identify products produced with lower environmental impact and allow consumers for making conscious decisions based on scientific evidence?
P. Can we think of a leadership structure at local scales that could be supported by economic instruments such as the CAP?

In many areas farming is still not a lucrative business and the family economy and personal goals influence the transition to sustainable agriculture. Moreover, more **sustainable food production entails an additional price and it is necessary that consumers and the entire food production chains become aware of this and pay this additional price** for these more sustainable products to keep farming economically viable. With respect to this, the following issues shall be reflected on:

Q. Can the EU help to enforce a fair price for more sustainable products?
R. Can the EU help to improve consumer awareness on more sustainable EU-products?

Another observation reflects on a more sociological aspect. On many occasions it has been brought to the attention of the project team that the **long term vision for the environmental protection** is necessary to convince farmers to undertake actions towards more sustainable farming. People working on the ground know very well the time needed for changes in the environment to happen and understand the importance of continuity that last longer than a term of office of any government. The EU regulations, especially the Water Framework Directive have rightly required the adaptation of the long term vision concept to the policy. It seems logical that legislations and policies from agricultural sector were harmonised with the WFD cycles. The problem however lies in a national realisation of these policies, especially in countries that experience extreme changes in election results which usually results in drastic changes in an organisation of governmental departments and policy approaches. **Continuity of approaches, even if modifications are required, is needed for successful implementations of programmes of measures**. Local institutions and policies shall be less dependent on changes on national level. With respect to this, the following issues shall be reflected on:

S. Can the EU regulations stronger induce the continuity of approaches on Member States with respect to implementation of environmental policies?

This project has proven that scientific knowledge regarding local scale conditions of a catchment can significantly improve efficiency of measures. Although it is unlikely that all catchments will ever have such a good recognition as the seven action labs studied in the Waterprotect project, the lessons learned is that more scientific approaches shall be used when designing water management, especially where local scientific studies are available. With this respect it would be worth to reflect on:

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T. How can we strengthen the position of local scientific expertise in water management at a catchment scale?

The above questions have been developed based on a study performed within seven action labs in seven European countries. Although the special extent of work may seem inadequate to make EU-wide conclusions, nonetheless it has to be raised that the highlighted problems were similar for the action labs, indicating a similar pattern across EU countries.

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