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## Recent trends in crop rotation in the Czech Republic and associated soil erosion risks

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In last decades several trends have been visible in agricultural land use in the Czech Republic. Among all oil rape production was raised (mainly in last 10 years) and maize production was enlarged in some regions where bio-fuel stations have been newly built. As a row crop, maize without proper management control leads to accelerated water erosion and sediment transport. Oil rape is generally considered as a relatively soil preserving crop, supporting also infiltration by a root system. But seeding period of oil rape in the Czech Republic starts in August still in the peak period of erosive rainstorms. Recent risks associated with both crops will be presented by data from field rainfall-runoff simulations, targeted on developing actual crop protection factor (C-factor) of USLE for Czech conditions. The second source of the data for presenting risk trends is Czech soil erosion monitoring database of State Land Office (<https://me.vumop.cz/>), where many occurrences of erosion damages were identified on both crops. Finally, study focused on bare soil remote sensing via Landsat 8 and Sentinel 2 in recent years showed link between erosion risks and the two above mentioned crops.

National implementation of European cross compliance policy in the Czech Republic targeted the protection also to fight these risky trends, but the power of the agricultural policy, as will be presented, is limited in this scope. We see similar threats in other European countries and we were able to visit North East China regions with intensive corn production where soil erosion by water is causing serious soil and water degradation. Therefore, shared knowledge on strategies how to prevent risky soil managements could lead to benefits in both European and Chinese conditions.

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