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THEORETICAL-METHODOLOGICAL AND APPLIED ASPECTS OF SOIL PROTECTION MEASURES AGAINST EROSION IN UKRAINE TAKING INTO ACCOUNT LOCAL AND GLOBAL CHALLENGES (SECOND HALF OF THE XX - BEGINNING OF THE XXI CENTURY)

Aim. To analyze the scientific and organizational approaches in the historical aspect of the phased research of the Department of Agricultural Land Use and Soil Protection against Erosion of NSC "IZ NAAS" for the period of establishment and development. Methods. The methodological basis of the study is the general scientific principles of historical reliability, scientific objectivity, continuity and dialectical understanding of erosion processes. A systematic approach to substantiation of scientific and methodological bases of the essence of soil-ecological crisis phenomena in land use and protection of agricultural lands from degradation processes. Results. Many years of experience are summarized and the main results of significant research and production research on the development of a set of measures to protect soils from erosion, in particular in the context of the risks of increasing water and wind erosion, climate change and desertification. The newest approaches are defined to protection and rational use of land resources in erosion-dangerous agrolandscapes, directions of development of measures on protection of soils from

erosion which will be directed not only on diagnostics of infringements of erosion-ecological condition, but also will cause the differentiated approach to regulation of intensity of destructive processes in agroladscapes in order to achieve a neutral level of land degradation. Conclusions. Based on anintegrated scientific and historical analysis, the effectiveness of the system of anti-erosion, soil protection measures on sloping lands in the implementation of soil-protective adaptive-landscape system of agriculture as an example of best practice in the field of protection and environmentally safe use of land resources.

Key words: *history of science and technology, evolution, land protection, soil erosion, land degradation, agro-landscape, land resource potential, soil protection agriculture*