Asian Journal of Scientific Research and Innovations
ISSN: 2715-xxxx (online) | IF: 10.23 | Vol: 1, issue 1
Available: http://asiansciencejournal.org

CLIMATE CHANGES, DESERTIFICATION, SALINIZATION AND EROSION

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Abstract: This in the article of the environment current ecological problems, including climate change, desertification, soil salinity and erosion processes come exit causes, development features and mutual dependency complex analysis Population number increase, industry of enterprises activity, village on the farm natural from resources intensive use and urbanization ecological to balance impact scientific in terms of It is also illuminated by anthropogenic pressure as a result water and land resources to degradation meeting, biological diversity reduction, atmosphere of the air pollution and food to safety to the surface coming threats International scientific research and modern ecological approaches based on Uzbekistan natural-geographical to the conditions suitable solutions offer water saving, soil fertility storage, industry waste reduce, green regions expansion and stable development principles current of reaching importance is based on. The research main purpose ecological problems brought issuer factors systematic assessment and the environment protection to do effective directions from marking consists of.

The key words: climate change, desertification, soil salinization, erosion, anthropogenic impact.

Introduction. Environment ecological stability modern society development, economic security and human health determinant important from factors Today is one. on the day climate change, desertification, soil salinity, erosion, atmosphere air and water resources pollution mutual closely related global problems as manifestation This is happening. of processes intensification natural factors with one in line population number increase, industry working release expansion, intensive village farm and Urbanization is also important place The IPCC scientific to the assessments according to, climate change and from the ground wrong use arid in the regions land degradation and desertification the risk amplifier mutual influential are factors. Especially in Uzbekistan such as arid climate to the conditions has in countries water shortage , soil salinity and wind erosion village farm efficiency and ecological to safety serious impact shows . In the FAO 2024 global assessment world 1.381 billion hectares land salinity or loyalty to the problem face arrived record This indicator soil degradation international on a scale current ecological problem that it is confirms. Population number increase food, drink water, energy and stay to places was demand increases. Industry enterprises waste, rural on the farm chemical from tools from the norm more than use and traffic flow in cities increase and air, water and soil to the quality negative impact to show possible. However this consequences inevitable not: effective ecological management, modern technologies and natural from resources reasonable use through them reduce possible. The research purpose climate change, desertification, salinization and erosion mutual dependence identification, demographic growth, industry, agriculture farm and urbanization to the environment the impact scientific analysis to do and Uzbekistan under the circumstances ecological stability to provide aimed at practical suggestions from justification consists of.

Materials and methods : In the study climate change , desertification , soil salinization , erosion and anthropogenic of factors to the environment the impact study for international scientific reports , environmental monitoring materials and to the topic related scientific of literature comparative to the analysis based approach Information sources as Climate change according to intergovernmental experts Panel (IPCC), UN To the desert against struggle Convention (UNCCD), the UN Environment Programme (UNEP) and Food and village farm from the materials of the Food and Agriculture Organization (FAO) use in mind was caught . The research methodological basis systematic analysis, scientific generalization, cause and effect their relationship determination and territorial comparison methods organization Systematic analysis through climate in the conditions changes, water from resources use, soil degradation and biological diversity between connections studied. Cause and effect in the analysis population number increase, industry activity, intensive farming and urbanization atmosphere, water and soil to the quality impact to grow to the mechanisms attention focused on. Comparative global ecological approach trends Uzbekistan arid climate, irrigation farming and Aral Sea of the territory ecological features with related without to evaluate service Also, ecological problems to reduce aimed at water save, soil protection to make, waste management and green infrastructure develop measures scientific in sources cited principles based on analysis was done. In the study new field experience or independent statistic measurements held claim not done; conclusions used secondary sources analysis and there is scientific knowledge to generalize is based on.

Results. Research within climate change, desertification, soil salinity and erosion processes mutual dependency and human of activity to the environment impact analysis Analysis results temperature rise, water resources limitedness and from the ground wrong use soil degradation strengthen possible shows. Drought under the circumstances plant of the cover thinning wind erosion if it increases, it is wrong irrigation and drainage systems inefficiency in the soil of salts to gather conditions creates. Population number increase drink water, food, energy and land to resources was demand increasing, natural from resources use pressure Industry of enterprises gas waste, sewage waters and working release remains relevant cleaning systems enough unless atmosphere, water and of the soil pollution reason to be possible. Village mineral fertilizers on the farm and from pesticides from the norm more than use, to the ground wrong processing to give and from water ineffective use ecological problems further complicates. Urbanization as a result construction of the fields expansion, green of the regions reduction, vehicles number increase and household waste increase city ecological to the environment additional pressure creates. Uzbekistan under the circumstances this factors water shortage, irrigated of lands reclamation status and Aral Sea in the area ecological problems with integral related. Analysis results ecological problems effective reduce for water saving, soil fertility storage, industry waste control to do, village on the farm ecological safe methods application and of cities green infrastructure to develop aimed at complex approach the necessity shows.

Discussion. Research results of the environment ecological problems separately processes not, maybe natural factors and human activity between complicated relationship result that it is shows. Climate change drought the risk strengthen, water to resources pressure increase and of the soil natural recovery opportunities limit possible. With this together, wrong irrigation, forest and plant of the cover contraction and from the ground from the norm more than use desertification, salinization and erosion to increase take comes. So, ecological degradation only climate change with explanation enough not; earth and water resources management quality is also important doer importance has. Population number growth, industry development and urbanization natural to resources demand increases, but modern

technologies, efficient infrastructure and reasonable planning through this pressure reduce possible. In industry cleaning equipment improvement, turnover water systems current to grow, village on the farm the soil protector from technologies use and in cities green regions storage ecological risks reducer important directions. Uzbekistan for this issues, especially water shortage, irrigated of lands salinity and Aral Sea in the area ecological changes because of separately importance profession The problem effective solution to grow for environmental monitoring, scientific based territorial planning and state, industrial issuers and population cooperation necessary. With this together, offer being done measures local soil-climate conditions, economic opportunities and there is scientific information based on evaluation necessary.

Conclusion. Conducted analysis this shows that the climate change, desertification, soil salinity and erosion of the environment ecological to stability threat mutual, mutual related are processes. Population number increase, industry working release expansion, village on the farm natural from resources ineffective use and urbanization disorderly development this of problems to increase conditions create possible. Therefore ecological security provide only nature protection to do events with without limitation, economic development and territorial planning inseparable to the part rotation necessary. First , watering systems modernization to make water saver technologies wide current to grow and drainage systems efficiency increase through water waste and soil salinity the risk reduce Secondly , erosion against agrotechnician events , protection groves and to degradation encountered lands restoration programs expansion Third , industry in enterprises waste cleaning , re-cleaning work and from resources economical use requirements reinforcement Fourth , the village on the farm fertilizer and from pesticides scientific based in the standards use , exchange planting and soil status regular monitoring Fifth , urbanization is important . in the process green regions storage, public transport develop and waste sorting system improvement Sixth, ecological education and population to nature responsible attitude reinforcement necessary. This of measures consistent done increase Uzbekistan land and water resources protection to do, ecological risks reduce and stable development to their goals to achieve service to do possible. Proposals efficiency and clear territorial indicators, regular monitoring and the results periodic assessment through to be determined necessary.

USED LITERATURE

1. Food and Agriculture Organization of the United Nations (FAO). Global Status of Salt-Affected Soils. Rome: FAO, 2024 .
2. Intergovernmental Panel on Climate Change (IPCC). Climate Change and Land: An IPCC Special Report. Geneva: IPCC, 2019 .
3. Uzbekistan Republic Ecology, environment protection to do and climate change Ministry of Environment status about national lecture: Uzbekistan. Tashkent, 2024. 4. Uzbekistan Republic President . Until 2030 in the period Uzbekistan Republic of The environment protection to do concept confirmation about. Decree No. PF-5863 , October 30, 2019 . 5. United Nations Convention to Combat Desertification (UNCCD). Global Land Outlook 2: Land Restoration for Recovery and Resilience. Bonn: UNCCD, 2022 .
6. United Nations Development Program (UNDP). Environment and climate to change against fight: Uzbekistan according to materials. 2024
7. United Nations Environment Program (UNEP). Global Environment Outlook 6: Healthy Planet, Healthy People. Cambridge University Press, 2019 .