

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

**LOK SABHA**  
**UNSTARRED QUESTION NO. 2558**  
TO BE ANSWERED ON 19<sup>th</sup> DECEMBER, 2023

**REGENERATIVE AGRICULTURE**

2558. SHRI S. JAGATHRAKSHAKAN

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether there is a larger potential to generate carbon credits and ecosystem services through Regenerative Agriculture (RA);
- (b) if so, the details of the steps that are proposed to be taken by the Government keeping in mind that lifecycle analysis and valuation of ecosystem services can provide larger carbon offsets to incentivize farmers through carbon credits and ecosystem services;
- (c) whether the Government is cognizant that Regenerative Agriculture (RA) can help in addressing the second-generation problems of Green Revolution in irrigated intensive systems as well as in drylands where natural resources are severely stressed; and
- (d) if so, the details of the initiatives that are proposed to be taken by the Government keeping in mind that RA is a 'win-win' approach that helps in transforming agri-food systems while addressing the existing challenges in agriculture?

**ANSWER**

MINISTER OF AGRICULTURE AND FARMERS WELFARE  
कृषि एवं किसान कल्याण मंत्री (SHRI ARJUN MUNDA)

(a) to (d): Generation of carbon credits in agriculture is important to promote remunerative agriculture through adoption of regenerative/ sustainable agriculture practices and linking farmers to carbon markets vis-à-vis realizing ecosystem services from such practices. Regenerative/ sustainable agriculture is a way of farming to build and improve soil fertility, while sequestering and storing atmospheric CO<sub>2</sub>, increasing

on farm diversity and improving water and energy management. Some of the practices such as integrated farming systems, organic farming, natural farming, conservation agriculture and agroforestry-based production systems are considered as tools to promote regenerative agriculture. Many interventions launched under National Mission on Sustainable Agriculture (NMSA) such as agroforestry, micro irrigation, crop diversification, National Bamboo Mission, Natural / organic farming, Integrated Farming Systems, etc. have potential to sequester carbon in soil and provide ecosystem services thus helping in addressing the second-generation problems of Green Revolution in irrigated intensive systems as well as in dryland agriculture systems.

Indian Council of Agricultural Research through ICAR-Indian Institute of Farming Systems Research, Modipuram operates two research schemes namely All India Coordinated Research Project (AICRP) on Integrated Farming Systems to develop Integrated Farming System models and All India Network Programme on Organic Farming to develop package of practices for organic production of crops in cropping and farming systems perspective. As a result of these schemes, sustainable farming practices such as 71 prototype integrated farming system models for 26 States/UTs and organic farming packages for 72 cropping systems suitable to 16 States have been developed to provide technological backstopping. These models and practices are found to sequester more carbon, maintain farm diversity and improved water and energy management. The developed IFS models and organic farming packages have been shared with Central and State agencies for scaling. Need based capacity building programmes are also being organized for the farmers.

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