New Extension Methodologies and Approaches (NEMA)

New Extension Methodologies and Approaches (NEMA) is a network project of the Indian Council of Agricultural Research (ICAR) involving 11 ATARI's and 6 ICAR Research Institutes viz., IARI, CAZRI, CIFA, NDRI, IVRI and NRRI. ICAR research Institutes will lead the projects where as ATARIs will facilitate in implementing the project. Initially under the project, improved technologies viz., varieties, NRM, INM, IPM, technologies from fishery, veterinary, dairy, horticulture, engineering, etc. developed by NARS in last 5-10 years was identified for five agro- ecosystems by the ATARIs in collaboration with Institutes and respective subject matter institutes will be responsible for technologies related to agriculture (IARI, NRRI, CAZRI), horticulture (IIHR), dairy (NDRI), animal husbandry/Veterinary (IVRI), fisheries (CIFA) across agro-ecosystems.

Concept note of NEMA

Indian agriculture has progressed remarkably in the post-independence era. As a boon of green revolution India has not only become self-sufficient in food production over the years, but also has made noteworthy impression in global food chain due to market liberalization in recent past. However, there are still a number of challenges that need to be taken care of immediately, so that the nation can meet its increasing demand for food availability and food security. Some of these challenges include land fragmentation, risk of climate change, depleting natural resources, lack of quality management of produce, low profitability of small and marginal farmers etc. Currently, India holds 1st rank in the world in production of many commodities like chickpea, jute, millets, ginger, banana, mango, lemon and milk and holds 2nd rank in case of rice, wheat, sugarcane, cotton, lentil, onion, potato, tea etc. In spite of this notable progress in total food production, per hectare productivity remains to be a matter of concern. The pressure grows even more since India occupies only 2.4 per cent of world's resources with which it has to feed 17 per cent of world's population.

To combat these challenges, generation and dissemination of improved technologies is the call of the hour. The new agricultural technologies are considered to be the prime mover to the process of agricultural development in India. Understanding farmers' perceptions of a given technology is crucial in the generation and diffusion of new technologies and farm household information dissemination. The National Agricultural Research System (NARS) of the country which is one of the largest agricultural research networks in the world is already engaged in developing state of the

art technologies in the field of agriculture on regular basis. There are a good number of improved technologies like improved crop varieties and other technologies like zero tillage, direct seeded rice, SRI technologies etc. But the question arises about the rate of adoption of these technologies by the end users. Presently, there is meager documented information about the adoption status of improved NARS technologies and also the stakeholders' perception about these technologies over a substantial geographical region. There is no synchronous study to assess the extent of adoption, its determinants and impact. Whatever information is available is of scattered and sporadic in nature. This hinders researchers in drawing meaningful generalization. Therefore, there is a need for a country-wide integrated study that will bring into focus the understanding of adoption of improved technologies and its determinants in the country and as well as across the world. It will help in impact assessment of these technologies as a result of their adoption.

Thus, a network project is conceived to generate data on adoption of selected improved technologies, the determinants of adoption, constraints and impact from a large pool of samples across the country for generalization and drawing meaningful conclusion. The specific objectives of the study are given below.

During the year 2021-22, eight (8) National network projects, namely Climate Resilience, Gender and Nutrition, Residue Management, Doubling Farmers Income (DFI), Tribal Sub-Plan (TSP), Aspirational Districts, ARYA network project and Pulses Network Project are merged with the NEMA project with financial provision under different project for proper implementation of the project. Under ATARI- Zone VII, 27 numbers of KVK are involved in TSP network project, 5 KVKs are involved in Network project on Aspiration Districts, 3 numbers involved in Arya network project, 17 KVKs involved in network project on DFI, 2 KVKs are involved in Network project on climate resilience and 6 KVKs are involved in network project on Gender and Nutrition.