



# ICAR NEWS

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## BREAK THROUGHS

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## MLO - nematode suspected in causing no-podding syndrome of soybean

### *Symptoms of no-podding syndrome*



Profuse bud proliferation and deformed pods



Floral organs transformed into leaf-like structures (phyllody)



In-situ germination of seeds within premature pods

### *Possible vector of causal mycoplasma-like organisms*



Nematodes isolated from flower-buds of affected plants

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**I**N India, women are the key to household food and nutritional security. They help in maintaining food production, economic access to available food and diversification of food for nutritional security, while facing enormous social, cultural and economic constraints. Women also participate in many production and food-processing operations, including storage, packaging, transport and marketing, and spend considerable time in management of farm-animals, besides responsibility of cooking food. All these operations they perform remarkably well without any formal training. But, despite the overall developments in India, women in many villages still carry water, fuel and fodder from long distances. The drudgery in their 'on farm' and 'off farm' work affect their efficiency adversely.

Today, women's technological empowerment and education are the key issues before the society for saving them from drudgery. And also for agricultural growth, it is necessary to address these concerns on priority.

To empower farm-women to perform effectively and efficiently, we must improve their physical and human capital. Women's abilities can be enhanced by improving their access to resources, technology and information. All technology development programmes have generally been carried out on the assumption that technologies are gender neutral or gender bias does not matter. But women have quite different levels of education, experiences, skills, physique, stamina, compared to men. Therefore, there is need to design appropriate technologies for farm-women matching to their anthropometric capabilities and limitations.

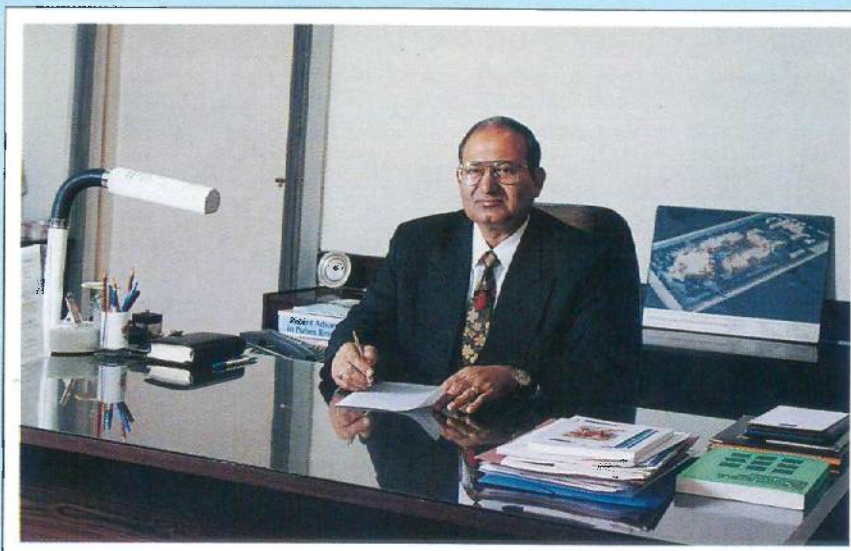
It is indeed encouraging that our National Agricultural Research System, comprising ICAR Institutes and State Agricultural Universities, has laid considerable emphasis on various aspects relating to women in agriculture. About 20 home-science colleges provide technical training on food and nutrition, child and human development, family-resource management, clothing and textiles and extension education at the undergraduate and post-graduate levels for girl-students. In SAUs, these colleges have

specific technologies, and to develop extension models in generating subsidiary income through poultry, animal husbandry, apiary, fisheries, sericulture etc. Besides, most of the ICAR institutes have research programmes related to development of technologies suiting farm-women. Our agricultural engineering colleges and institutes have evolved small tools and implements especially for farm-women for improving their efficiency in various farm and post-harvest operations. Techno-literacy of

women and increased education will have substantial impact on the adoption of improved technologies in agriculture. Our all the 261 Krishi Vigyan Kendras have trained home-science faculty for training farm-women and girls, and the results so far are indeed commendable.


The above efforts by the National Agricultural Research System are at the best modest and have to be intensified to har-

ness vast unrealized potential existing within women-power in rural India. We have to increase access to improved technologies and knowledge to our farm-women, and use their expertise in evaluation of new technologies and development of technologies that not only relieves women's drudgery but also make their life safe and comfortable. It is the most important issue today if we want sustainable household food and nutritional security. It is my firm belief that all concerned will appreciate this hitherto untapped potential, and make efforts to harness the same to full advantage to attain required prosperity in our rural society.



**Dr R.S. Paroda, Director-General, ICAR**

specific mandate to address problems of farm-families and for improving quality of their life. Rural home work experience (RHWE), a new scheme, has been added in the curriculum of home science to draw rural-families close to scientific developments. In 1986, the ICAR had started an All-India Co-ordinated Research Project on Home Science to undertake relevant research programmes for developing technologies for the betterment of rural-families and for women empowerment. And during VIII Five-Year Plan, ICAR took initiative to establish a National Research Centre for Women in Agriculture. The Centre is mandated to build a database on women in agriculture and on impact of agricultural modernization on farm-women, ergonomic management of farm-women's drudgery, development and promotion of women

  
(R.S. Paroda)