



## 3<sup>rd</sup> International and 17<sup>th</sup> National Crop Science Congress of Iran

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Shahid-Bahonar University of Kerman, Kerman, Iran

*“Knowledge-based, Smart Agriculture and Contract Farming”*

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**Speech Topic:** Farmer Field School Approach- a better tool to prepare farmers for the future challenges

### **Abstract:**

Feeding the ever-growing population and the related industry around the world, means harnessing the food and agriculture (raw material) systems more effectively and efficiently to ensure sustainable agricultural & industrial development and food security. Agriculture production influences availability as well as diversity of diet. The improvement in crop-livestock productivity and diversity increases farm incomes; reduces consumer prices, and enhances diverse food and industrial supplies. Agriculture also stimulates rural development which is realized in the form of an increased supply of raw materials for the processing industries, workforce employment, and productive infrastructure development at the community level. A sustainable agriculture ensures food security for all in such a way that the economic, social and environmental basis for generating food security and economic development for future generations is not compromised. Hence the fundamental rights of every human being can be protected if provided with sufficient quality food that is healthy, affordable, safe and culturally acceptable.

To ensure the sustainable agricultural development and food security there are a number of stakeholders responsible; and one of the key stakeholders is the producer- the farmer. With the the current boom of disruptive technologies in every sector including agriculture, the capacity of the producer/farmer in dealing with diverse challenges, is a prerequisite- rather vital. Thus the education of farmers in understanding the science of crop production, crop nutrition & protection, science of climate change and use of technologies, is essential to enable the farmers to remain competitive sustainable producers. Farmers work in the crop fields; and any education/training programmes must go to the field for hands-on learning, rather than taking farmers to the walled environments of institutions for educating them theoretically. They must be educated and made skilful through an inquiry based and hands-on learning method.

The best hands-on method so far recognised worldwide, has been the season-long Farmer Field School (FFS); whereby 25-30 farmers facilitated by expert facilitators come together to work in groups and discuss crops and/or livestock. They work like scientists, observing their crops pass through different stages of growth and what scientific processes take place during the crop growth till maturity, what factors and how they affect crop growth, what nutrition and inputs etc. are required? They set up experiments, collect data, make analyses in groups and take decisions. FFS process not only makes the farmers experts of their crops and/or livestock but also empowers them to take key decisions by themselves for crop/livestock management. It leads to community organization and the participants become better managers of their personal matters and community issues as well as the agro-ecosystem and the services it provides.

The presentation will highlight the FFS as an inquiry based learning approach and touch upon the principles and important aspects of FFS as well as the convenience it provides for farmers' practical learning, empowerment and leadership skills.

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