

## **Elections to CSAM Governing Council (Pakistan)**

### **Aim**

The aim is to enhance crop productivity of the member countries to make them food secured nations by interventions of sustainable and innovative farm mechanization technologies, standardization of farm machinery and less reliance on human labour.

### **Vision**

Our vision is to increase crop productivity for feeding ever increasing population of the world with the same or even less available natural resources and safeguarding the human environment using smart mechanized agricultural technologies.

### **Commitments**

- Segregation of member countries in sub-groups according to their socio-economic conditions, cropping patterns, issues and challenges and design and introduce farm machinery according to their demand and cropping zones.
- Most of the member countries have their major focus of development of field machinery, like land preparation, sowing, harvesting and threshing. According to FAO, about one-third of all food produced is either lost or wasted before consumption. Therefore, new focus should be given on introduction of innovative postharvest processing and value addition technologies to increase income of farmer and reduce produce losses. Reduction in postharvest losses will reduce cost of production, increase trade and distribution of food materials, lowers the price for consumer and increases the farmer's income.
- In the developing countries, most youth population migrates to cities for official jobs and most of the farming work is being carried out by women. We need to design and develop gender-friendly tools and machinery according to women comfort, having less drudgery and more efficiency, e.g. use of drones for spraying of crops and introduction of other smart technologies in agriculture. Capacity building of women workers for operating these machines will help in increasing efficiency of farm operations as well as productivity on farms.

- Application of alternate energy sources at farm level are desired to reduce cost of production of crops and to protect human environment. In world, solar energy is abundantly available and millions of tons of biomass is available as a cheap source. Focus will be given to solar based technologies and the use of biomass and biofuels for getting farm power and to replace fossil fuels. Renewable energy also includes generation of power to do a number of farm tasks: pumping water for irrigation, for livestock or for domestic use; lighting farm buildings; powering processing operations and others. These forms of renewable energy include solar energy, wind and water power, oil from plants, wood from sustainable sources, other forms of biomass (plant material), and biogas (gas produced from fermentation of manure and crop residues).
- Capacity building of young engineers, technicians and manufacturers in the field of advanced design and precision manufacturing disciplines, such as CAD and CAM. Capacity building programmes for the fresh university graduates should be designed so that a skilled human power can be prepared for industrial employment.
- Thematic seminars and workshops should be followed-up by execution of pilot projects to demonstrate good practices of sustainable agricultural mechanization to member countries.
- A strong coloration between R&D institutes, academia and industry should be developed for sustainable agricultural mechanization.
- Farm machinery display centres should be opened in member countries, where useful machinery should be displayed according to local crop production patterns.
- Strengthening of custom hiring systems and rental services of agricultural machinery at village level should be introduced.