

**Key discussions and takeaways from
webinar on**

**“opportunities and challenges in agri
and rural sectors post COVID”**

by Innovative Thought Forum (ITF)

16th June 2020

Programme

- Welcome and introduction -Mr S B Dangayach, Founder Trustee, ITF
- Opening remarks- Prof Satish Deodhar, Leading economist and professor at IIMA. Author of several books incl Economic Sutra
- Energy independence through microgrids by Mr Rahul Kumar Kandoi, Associate Director, Smart Power India and leader in development of mini-grids and innovative energy business models
- New Possibilities of AgroPV in India by Mr Pranav Mehta, Chairman, National solar energy federation of India and International thought leader in renewable energy
- Huge untapped potential of bioenergy and organic fertilisers by Dr A R Shukla, Adviser -Bio energy (Retd), MNRE, GOI and President, Indian biogas Association
- Soil health- Vital for human health by Mr Santosh Sahane Master trainer for Plant Protection, Organic Farming, Agribusiness Management, waste management and ex CEO of Bhagyalaxmi Dairy
- Sustainable and holistic agriculture by Dr G V Ramanjaneyulu, Founder, Centre of sustainable agriculture and thought leader for agri policy and holistic agriculture
- International opportunities in agri and allied sectors by Prof Rakesh Mohan Joshi Chairperson, Research, IIFT and renowned international consultant in “global trade in agriculture and food products”
- Resilience of Indian agriculture to become growth driver by Dr L K Pandey, Founder of Ananya Seeds Pvt Ltd and eminent advisor to food and agribusiness
- How Agritech start-ups can help farming post COVID by Mr M V Ashok Former CGM, NABARD Adjunct Professor, Centre for Agribusiness Management, Faculty of Social Innovation, Partnership & Co Creation, MIT World Peace University, Pune
- Nutrition based Agribusiness opportunities by Mr Siddhartha Gautam, CEO, Agribusiness incubator, Birsa Agriculture University, Ranchi
- Closing remarks and road ahead by Padmashri Dr V Prakash, Former Director, CFTRI

Important Discussions

- During COVID, 3 ordinances passed- freedom from APMC, abolition of essential commodities act and contract farming .Revolutionary in spirit as farmer or producer now free to sell his produce to anybody in the country besides APMC. Contract farming also liberalised by centre. Can be followed suitably by states
- To increase demand for agricultural commodities, investments in key logistics must be enhanced. Moreover, e-commerce and delivery companies and start-ups need to be encouraged with suitable policies and incentives.
- Private investment to flow into the sector for creating capacity in storage and logistics which currently not forthcoming due to APMC Act
- Energy economics now very different. Renewables like solar and wind cheaper than fossil power though discontinuous

- Demand side studies show that agri and rural enterprise power demand mostly during day and not 24x7. Can be met through renewables
- Decentralised power production in tune with local demand now feasible. Micro or mini grids worth exploring and expanding in business mode as quality power in sync with demand fetches price on perceived value. Tata, Smart Power Systems etc working to create entrepreneurial models for micro and minigrids that will mainly use renewables like solar, biomass, biogas, wind etc. Hundreds of successful examples in U P, Bihar, Jharkhand etc.
- Solar power as additional crop for farmers in Gujarat under SKY. Scheme expanded pan India under KUSUM. Farmers can produce solar PV power on their farmland, use it for pumping or other demands and feed balance in grid to earn decent returns
- Land shortage problem solved with successful installation of solar PV on farms at greater height to continue with crops in same land
- Biomass mapping done. Huge scope for conversion of biogas from animal, food and kitchen wastes. SATAT great only in cases of economical and regular supply chain. Importance to be given to grid of small plants at individual or community level
- Fertiliser value not yet captured. To be done through active involvement of Min of Agri and Min of Chemicals and fertilisers
- Recognition of soil science as vital by all. Damage of soil by chemical fertilisers to be corrected by organic farming through appropriate routes. Biogas slurry and fertiliser found wonderful for restoration of organic carbon and health
- Low level processing and lower value addition in agri and food processing major factors hindering export performance despite India's huge production base and competitive advantages
- Demand for agricultural inputs and allied services like warehousing and cold storage increasing in india at a fast pace. Also need for robust and transparent institutions for e-NAM to deliver long-term benefits
- Value addition to agriculture produce starts at post harvest level. Includes even primary processes like sorting, grading, cutting, seeding, shelling, packaging etc. With power as per demand, chances for rural enterprises for processing very bright
- Need to preserve indigenous seeds and bio diversity. Successful experiments of seed and gene banks using local resources of small organisations like Ekal Vidyalay very inspiring
- Organic agriculture of different types like Amrit Krishi, ZBNF, Biodynamic Agriculture etc to be mainstreamed. Many variants now available that deliver better net incomes to farmers while maintaining health of soil, water and environment. Also helpful in better health of human beings and animals
- Organic wastes of all types convertible into biogas, slurry, fertiliser and power. Score of the country very poor as yet
- Promotive and preventive parts of health now recognised as vital as curative. Silent shift to wellness where food and nutrition crucial. Scope for cultivation of medicinal and nutritional plants in big way. Thrust also on health foods to change demand pattern

- Subsidies in present forms and guaranteed procurement prices causing distortion in cropping. Undesirable cultivation of water guzzling crops in water deficient areas due to free or subsidised power. Alternative ways to give benefit like direct cash transfer to farmers to be worked out
- Subsidies on agri inputs or equipments like biogas plants for decades deterrent to innovation, quality improvement and lower cost
- Start ups in agri and rural sectors not vibrant. Scope for motivating many people aiming for quality life in smaller places to go for new enterprises
- Artisan class neglected. Rural enterprises also not very successful due to poor logistics, market connect, branding and marketing
- Skilling for farming activities uncommon. Same true for building services or industrial services. With reverse migration scope for blended skilling
- Marketing part ignored by most farmers, FPO 'sand Cooperatives
- Cold chain or cool chain solutions not yet available for most crops and areas
- Productivity in dairy to be improved. Fisheries to be also given more attention
- Scope for using new technologies for improvement in all domains. Local platforms capable to deliver better services and solutions. Scope for new ventures by entrepreneurial class or FPO's or cooperatives

Key Takeaways

- With agriculture remaining buoyant during pandemic, importance of healthy foods, nutritious fruits and vegetables, nutraceuticals, herbaceuticals, millets etc now all time high
- Opportunity to transform agri with judicious use of energy on demand through blend of renewables produced by mini grids or through solar PV and biogas plant installation on own farm or in cooperative
- Energy independence and micro irrigation to be combined with better soil health through infusion of organic slurry and fertiliser for foods with improved nutrition and better realisation in the market now opened up by recent ordinances
- Greater attention to our national needs for changing cropping pattern. Water guzzling crops like rice in Punjab or sugarcane in Marathwada to be logically replaced with much needed pulses and millets that are good for soil and our nutrition
- Need to relook at MSP schemes in wake of ordinances to permit market forces to decide on the crops
- Need to review subsidies of all types on crops to look at more efficient method of delivery of benefit to farmers
- For capital goods, subsidy schemes to be recast for a limited period to promote innovation and open market competition
- Reduced subsidies to be replaced with massive investments in demonstration, promotion and extension activities or IEC in all segments by government

- Higher investments in road and IT infra for better connectivity and logistics
- Big push to cold and/or cool chain infra at farm or local level .Spread of many solutions that are proven by use of renewables that can be produced or sourced locally. Work to be done to bring down capital as well as operating expenses using locally produced power
- Better coordination needed between MNRE, Agri, Animal husbandry and Fertiliser ministries for a quantum jump in organic manure, slurry and fertilisers
- Policy for use of organic fertilisers to be reviewed and made pragmatic for multiple benefits to the country. Aggressive extension work everywhere
- Marketing to be given more importance for assessing needs and demands of customers within India and abroad
- Lot of opportunities for farmer to consumer connect using technology
- Freedom now to think of market and technology based solutions in cultivation, warehousing, cold chain, logistics, distribution, branding etc
- Opportunities for all types of value additions through simple processes as well as appropriate technologies
- Opportunities to convert waste into wealth while aiding Swachh Bharat Abhiyan
- Wasted lands (good lands lying unutilised) to be utilised for increase in employment and production
- Wastelands to be offered on lease to people for income generation through dairying, animal husbandry or aquaculture
- Huge scope for organic cultivation of nutritional crops and medicinal plants
- Opportunity for products based on the above to give immunity boosting solutions all over the world
- Need to upgrade skills in agriculture and rural enterprises for improving efficiency and quality
- Community seed banks feasible and can be created on successful models
- Entrepreneurs to be sensitised about possibilities through agri in rural areas relating to all domains including agritech

Actionable Points

- 1) Highest priority to organic slurry and organic fertiliser from biogas plants through coordination among all ministries for improved health of soil, animals and people
- 2) Aim for energy independence from grid through various renewables especially solar PV and biogas or biomass to power in local mini or microgrids
- 3) Work on market based and consumer centric solutions for best realisation of value
- 4) Improvement of net income by reducing cost of inputs and better price realisation of farmers, FPO's and cooperatives by proven methods of organic farming and cultivation of demanded crops

- 5) Boost skilling and entrepreneurship along the value chain in agri and rural sectors using market and technology based solutions
- 6) Focus on national needs in cropping and give big push to water efficient millets and pulses
- 7) Recast subsidy schemes for capital goods to limit each to a few years for promoting innovation and competition

Legend

Agri- Agriculture, horticulture, animal husbandry, dairy and fisheries

COVID- COVID19

APMC- Agricultural produce Market Committee

SKY- Suryashakti Kisan Yojana

KUSUM- Kisan Urja Suraksha evam Utthan Mahabhiyan

SATAT- Sustainable and Alternative Technology for Affordable Transportation

ZBNF- Zero budget Natural Farming

FPO- Farmer Producer Organisation

IEC- Information, Extension and Communication

MNRE- Ministry of New and Renewable Energy

IT- Information Technology

e NAM- electronic National Agriculture Market

SB Dangayach

Founder Trustee Innovative Thought Forum (ITF)

and

National Vice President Arogya Bharati (AB)

+919998822680

sbdangayach@gmail.com

www.itf-india.com