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July 2021 - ₹80

Agriculture & Industry Survey

India's Leading Business Magazine for Agriculture

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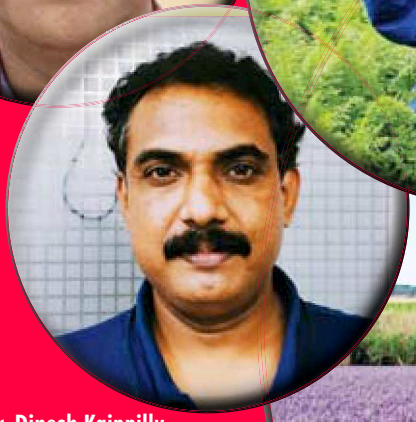

Dr. Dinesh Kaippilly,
Kerala University of Fisheries
and Ocean Studies

Netherlands Agriculture

A Tiny country feeds the world !

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Netherlands Agriculture

A Tiny country feeds the world !

It is time we in India, more so from Indian agriculture universities and other agri teaching institutes, should become updated with what is happening in other parts of the world. New agriculture research and new agri innovations. We started from here and next few months we read more about other new discoveries and new developments in other parts of the world— Editor

The world agriculture is changing. And how it is changed in the tiny European country The Netherlands! Here are some brief notes from National Geographic magazine. Almost two decades ago the Dutch made a national commitment to sustainable agriculture under a rallying cry, "Twice as much food using half as much resources". Since 2000 the farmers have reduced water for key crops more than 90 percent. They have also completely eliminated the use of chemical pesticides on plants in greenhouses.

The Netherlands is a small, densely populated country, with more than 1,300 inhabitants per square mile. It's bereft of almost every resource long thought to be necessary for large-scale agriculture. Yet it's the globe's number two exporter of food as measured by value, second only to the United States, which has 270 times its landmass. How on Earth have the Dutch done it?

Seen from the air, the Netherlands resembles no other major food producer—a fragmented patchwork of intensely cultivated fields, most of them tiny by agribusiness standards, punctuated by bustling cities and suburbs. In the country's principal farming regions, there's almost no potato patch, no greenhouse, no hog barn that's out of sight of skyscrapers, manufacturing plants, or urban sprawl. More than half the nation's land area is used for agriculture and horticulture.

Banks of what appear to be gargantuan mirrors stretch across the countryside, glinting when the sun shines and glowing with eerie interior light when night falls. They are Holland's extraordinary greenhouse complexes, some of them covering 175 acres.

These climate-controlled farms enable a country located a scant thousand miles from the Arctic Circle to be a global leader in exports of a fair-weather fruit: the tomato. The Dutch are also the world's top exporter of potatoes and onions and the second largest exporter of vegetables overall in terms of value. More than a third of all global trade in vegetable seeds originates in the Netherlands.

The brain trust behind these astounding numbers is centred at Wageningen University & Research (WUR), located 50 miles southeast of Amsterdam. Widely regarded as the world's top agricultural research institution, WUR is the nodal point of Food Valley, an expansive cluster of agricultural technology start-ups and experimental farms. The name is a deliberate allusion to California's Silicon Valley, with Wageningen emulating the role of Stanford University in its celebrated merger of academia and entrepreneurship.

Ernst van den Ende, managing director of WUR's Plant Sciences Group, embodies Food Valley's blended approach. A renowned scholar with the casual manner of a barista at a hip café, van den Ende is a world authority on plant pathology. But, he says, "I'm not simply a college dean. Half of me runs Plant Sciences, but the other half oversees nine separate business units involved in commercial contract research." Only that mix, "the science-driven in tandem with the market-driven," he maintains, "can meet the challenge that lies ahead." The challenge? Put in bluntly apocalyptic terms, he says, the planet must produce "more food in the next four decades than all farmers in history have harvested over the past 8,000 years."

That's because by 2050, the Earth will be home to as many as 10 billion people, up from today's 7.5 billion. If massive increases in agricultural yield are not achieved, matched by massive decreases in the use of water and fossil fuels, a billion or more people may face starvation. Hunger could be the 21st century's most urgent problem, and the visionaries working in Food Valley believe they have found innovative solutions. The wherewithal to stave off catastrophic famine is within reach, van den Ende insists. His optimism rests on feedback from more than a thousand WUR projects in more than 140 countries and on its formal pacts with governments and universities on six continents to share advances and implement them.

Agriculture & Industry Survey

Vol. XXXI No. 7
July 2021

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India

Published by
Vadamalai Media Private Limited

Regd Office: Pichanur, Coimbatore, Tamil Nadu Printed, Published & Edited by Mrs. Shenbi on behalf of Vadamalai Media (P) Ltd. Published from C-2/286, 4th Main, 2-C Cross, BDA Layout, Domlur II Stage, III Phase, Bangalore - 560 071 and Printed at Print-o-Graph, No.124, Sultanpet, Bangalore.

Online Meetings @ www.agricultureinformation.com

Upcoming events

JULY 6, 2021
3:00 pm
Dr. Praveen Kumar Singh on "Sugarcane Seed Production-Breeding"

05.00 PM
Dr. PK Shrivastava on "How to establish a dairy business successfully"

JULY 7, 2021
3.00 PM
Dr. Arumugam Thangaiah on "Post-harvest technology of fruits and vegetables"

5.00 PM
Dr. G. V. Srinivasa Reddy on "Best practices for be(er soil & water conservation"

JULY 8, 2021
3:00 pm
Dr. Siddaram Waded on "Labour saving technologies in Agriculture"

05.00 PM
Dr H.C. Gena on "Wasteland development through afforestation "

JULY 9, 2021
3:00 pm
Mr. Rajender Kumar on "Profitable vegetable cultivation in tropical humid regions"

05.00 PM
Mr. Amol Khandare on "Commercial cultivation of black turmeric and its contract farming"

JULY 12, 2021
3:00 pm
Mr. Rajeshnallaiah on "How to increase soil fertility and reduce input cost"

05.00 PM
Dr. Upendra Singh on "Value addition of fruits & vegetables – Emphasis on drying technology"

JULY 13, 2021
3:00 pm
Mr. Pramod Kumar Maurya on "Farm Mechanization – How farmers can earn more profit by using machines"

05.00 PM
Dr. Lachhman Das Singla on "Early and accurate diagnosis of parasites in proper management of dairy "

JULY 14, 2021
5:00 pm
Mr. Samiran Patra on "Business opportunities in seed production of pabda and koi"

JULY 15, 2021
3:00 pm
Mr. Pankaj Navani on "Data driven dairy management "

05.00 PM
Dr. Sharanabasappa Deshmukh on "The fall armyworm (FAW) – Effective management strategies and future action"

JULY 16, 2021
3:00 pm
Ms. Joanna Kane-Potaka on "Opportunities for millets cultivation and value addition"

05.00 PM
Dr. Sitesh Cha5erjee on "Choosing right pesticides & right methods to protect your crops"

JULY 19, 2021
3:00 pm
Dr. Basavaprabhu L. Patil on "Cu5ing edge technologies for the management of viral diseases in crops"

05.00 PM
Ms. Kshitiz Srivastava on "Vegetable farming – Management of root knot nematodes"

JULY 20, 2021
3:00 pm
Dr. Geetha P.N. on "What is sustainable agriculture? What are the different types of sustainable farming methods?"

05.00 PM
Mr. Thillaikannan Veeraragavan on "Sugarcane development with mechanization to overcome labour problems"

JULY 22, 2021
3:00 pm
Mr. Yogesh Thite on "Egg Processing and marketing"

05.00 PM
Dr. Munish Kumar on "Natural Resource Management for climate resilient agriculture"

To participate in these online meetings please visit www.agricultureinformation.com and click on BECOME PREMIUM MEMBER

Online Meetings @ www.agricultureinformation.com

Recently Completed Meetings

Dr. Bikash Ghosh on "Improved methods of cultivation of guava"

Dr. Bikash Ghosh is a Retired Professor at Bidan Chandra Krishi Viswavidyalaya in Mohanpur, Nadia District in Bidan, West Bengal. Dr. Bikash Ghosh says guava is one of the nutritious and hardy crop. It can be grown in wide range of soil and climatic condition. Right planting and density is required for sustainable production.

Mr. Vimal Panjwani on "Renewable energy for agriculture / farmers"

Mr. Vimal Panjwani is the Founder & CEO of AgriVijay in Pune, Maharashtra. To know more view https://bit.ly/3i5obwL

Dr. Chandra Kiran Sant on "Opportunities and Challenges in Indian Dairy Sector"

Dr. Chandra Kiran Sant is the Dairy Advisor at Livestock Management Centre in Mumbai, Maharashtra. He is also associated with Gomati Cooperative Milk Producers Union, Tripura as Expert Dairy Development for improving the milk quality & quantity as well as oversee installation of 40000 LPD Dairy Processing Plant. To know more view https://bit.ly/3dAjWqq

Dr. V. Vani on "Post harvest management and value addition of mango and other horticultural produces"

Dr. V. Vani is the Assistant Professor at Horticultural College and Research Institute in Periyakulam, Tamilnadu. Her interests are Food processing and preservation; Nutrition; Post harvest technology of fruit & vegetables and Quality control of processed products.

Dr. Sunil Sharma on "Papaya - Cultivation, value addition and marketing techniques"

Dr. Sunil Sharma is the Principal Scientist at Indian Agricultural Research Institute, Regional Station in Pune, Maharashtra. His interest is papaya farming. Dr. Sunil Sharma says chilling injury, high soil moisture and prevalence of viral diseases are major roadblocks in a successful papaya cultivation. The best way to cultivate papaya successfully is to avoid these stresses.

Dr. Udai Bhan Singh on "How to establish new orchard & high tech nursery"

Dr. Udai Bhan Singh is the Dean at College of Agriculture, Bharatpur, Rajasthan. His interest is establishment of orchard and high-tech nursery. To know more view https://bit.ly/3gjFxDn

Mr. Lakshmikanth on "Growing tissue culture banana plants"

Mr. Lakshmikanth is the Proprietor of Vigneshwara Biotech in Bengaluru, Karnataka. His interest is growing tissue culture banana G-9 & yelakki plants. To know more view https://bit.ly/3wQ2y8b

Ms. Kranti Choudhari More on "Direct marketing of farm products by farmers to consumers"

Ms. Kranti Choudhari More is an Agriculture Officer in the State Government, Ahmednagar, Maharashtra. Her interest is direct farm to home marketing of agricultural farm product. Ms. Kranti Choudhari More says they have connected farmers and urban consumers through whats app group. The products directly sold by them are vegetables,oils and many kitchen consumables.

Dr. Vijay Mahajan on "Breeding varieties in onion using unique genetic resources"

Dr. Vijay Mahajan is the Principal Scientist at ICAR - Directorate of Onion and Garlic Research in Pune, Maharashtra. His interest is onion and garlic. In this meeting he will cover the methods of breeding varieties in onion and how to produce pure seeds and maintain the variety for different seasons . To know more view https://bit.ly/3hBAGzO

Mr. Rajender Kumar on "Soilless leafy and herbs under retractable roofs"

Mr. Rajender Kumar, Business Development Manager-South & East Asia, Cravo Equipment Ltd., Canada. The retractable roof production system or RRPS has been developed by Cravo over the last 35 years, to help growers create superior results using a system that combines the benefits of climate optimization, nature and protection. To know more view https://bit.ly/3kJeymi

Ms. Sangita Sharma on "Food Forest, Your Healer"

Ms. Sangita Sharma is the Chair Person and Founding Trustee of Annadana Soil and Seed Savers Network in Bangalore, Karnataka. Her interests are regenerative agriculture, creation of food forests, seed conservation, sustainable living, foods that heal and empowering youth to be the catalysts for ecological change. To know more view https://bit.ly/3qIoYoP

Dr. Mallikarjuna S. Ayyanagowdar on "Issues in current irrigation system and way forward"

Dr. Mallikarjuna S. Ayyanagowdar is the Professor and Head - Department of Irrigation and Drainage Engineering at University of Agricultural Sciences, in Raichur, Karnataka. His interests are Irrigation Water Management, RS & GIS Applications in Irrigation Water Management and Agricultural Drainage.

Dr. TN Prakash Kammardi on"Importance of distribution of farm commodities during Covid"

Dr. TN Prakash Kammardi from Bangalore is the Retired Professor of Agricultural Economics, UASB and Formerly Chairman KAPC . His interests are policy research, advocacy and action related to agriculture, environment, sustainable development and just & equitable society .

Dr. Amit Mandal on "What is Biofloc Technology: How it helps to enhance aquaculture productivity "

Dr. Amit Mandal is an Assistant Professor (Fisheries) at College of Fisheries, Guru Angad Dev Veterinary and Animal Sciences University in Ludhiana, Punjab. His interests are Aquaculture Technologies and Fish Culture Practices To know more view https://bit.ly/3hAzTzc

Dr. Jyoti Dhakane-Lad on "Utilization of agro-biomass for green packaging and home-textile"

Dr. Jyoti Dhakane-Lad is a Scientist at ICAR-CIRCOT in Mumbai, Maharashtra. Her interests are Agricultural Processing and Utilization of agro-biomass residues for green packaging. Dr. Jyoti Dhakane-Lad says harvesting of various crops generates large amount of residues both on and off-farm. Globally, biomass production from agriculture is pegged at 140 billion metric tons per year. In India, around 500 million tons of crop residue is generated annually, out of which nearly 140 million metric tons surplus crop residue biomass.

Dr. Priya P. on "Integrated nutrient management in field crops"

Dr. Priya P. is an Assistant Professor (Agronomy) at College of Agriculture (University of Agricultural Sciences, Dharwad) in Haveri District, Karnataka. Her interests are Nutrient Management, Organic Farming, Precision Farming & Nanotechnology and Integrated Farming Systems.

Dr. Prakash Kisanrao Nagre on "How to make vegetable cultivation a profitable venture?"

Dr. Prakash Kisanrao Nagre is the Dean, Faculty of Horticulture at Dr. Panjabrao Deshmukh Krishi Vidyapeeth (Agriculture University), in Akola ,Maharashtra. His interests are Horticulture; Agro - forestry and Silviculture ; Vegetable , fruit and flower cultivation; protected cultivation; spices and plantation crops; nursery management.

Mr. Arvind V on "Mango softwood grafting for better yield"

Mr. Arvind V is the Proprietor of AVR Nursery in Salem, Tamilnadu. Mr. Arvind says that they produce around 12 varieties of mango saplings under Mango Softwood Grafting method.

Mr. Yashpal Morey on "Irrigation system designing and water management in agriculture"

Mr. Yashpal Morey is the Proprietor at Eastern Star Consulting Engineers in Nashik, Maharashtra. His interests are Lift Irrigation Schemes; Pipe Line Design; Water Management : water shed development, farm ponds, check dams etc. ; Poly House Design and Erection.

Mr. Deepak Kumar on "Proper guidance from soil testing to market linkage to increase income"

Mr. Deepak Kumar is the Founder & CEO of Yogitha Biofarming Private Limited in Kharagpur, West Bengal. They are working for small and marginal farmers in remote areas to increase their income through proper guidance from soil testing to market linkage and also protecting the life of soil & ecology by organic farming. Mr. Deepak Kumar says farmers are earning good but due to lack of guidance they can't save the earnings and Yogitha Biofarming is trying to fulfill that gap.

Dr. Nilesh Gaikwad on "Processing and value addition of pomegranate"

Dr. Nilesh Gaikwad is the Senior Scientist at ICAR-National Research Centre on Pomegranate in Solapur, Maharashtra. His interests are processing and value addition of pomegranate; Use of advanced processing technologies post harvest management of pomegranate fruit; Total utilization of pomegranate for food; pharmaeutical and cosmetics industry; Research and development for establishment of pomegranate processing industry for juice, fruit drinks, wine, seed oil, minimal processing, peel extract etc.

Dr. Basavaraju Puttalingaiah on "Agro-forestry: Scope and Sustainability"

Dr. Basavaraju Puttalingaiah is the CEO of House Plus Organics in Mysore, Karnataka. His interests are hybrid seed development and evaluation of farm crops and horticulture crops; Organic food production and marketing with nutritional evaluation; Farm development promotional activities.

Mr. Thomas T V on "Natural vanilla value-added products"

Mr. Thomas T V is the Senior Manager at Vanilla India Producer company Ltd., in Muvattupuzha, Kerala. His interests are vanilla procurement,processing and value addition.To know more https://bit.ly/3twQkik .

Mr.Yogesh Kumar Verma on "Subsidies and cultivation of olive farming"

Mr.Yogesh Kumar Verma is the Deputy Director at Agriculture Department , Government of Rajasthan in Jaipur, Rajasthan. His interests are olive cultivation, protected cultivation and fertigation. Rajasthan Olive Cultivation Limited runs under the brand name Rajasthan Olive Cultivation is owned by Yogesh Kumar Verma located at S.I.A.M. Campus Agriculture Research Institute, Durgapura, Jaipur, Rajasthan.

Mr. Ashvani Shukla on "IoT products that are helping farmers in smart agriculture"

Mr. Ashvani Shukla is the CEO of Aeron Systems Pvt. Ltd., in Pune, Maharashtra. He is a Graduate from IIT Kanpur with specialization in Aerospace Engineering. To know more view https://bit.ly/3hYwVol ; https://bit.ly/3p2BtLP

Mr. Shajath Ali M.K. on "Helping farmers to know about organic farming and marketing of their produce"

Mr. Shajath Ali M.K. is the Chief Executive Officer of Salem Organic Farmers Organization in Salem, Tamilnadu. He is basically an organic farmer, having an organization to help farmers to know about organic farming, marketing of their produce and also give training on inputs preparation. Their main crop is traditional rice and additional products are vegetables.

Dr. Chandra Kiran Sant on "Realistic perspective of Indian Dairy Industry"

Dr. Chandra Kiran Sant is the Dairy Advisor at Livestock Management Centre in Mumbai, Maharashtra. He is also associated with 1) Gomati Cooperative Milk Producers Union, Tripura as Expert Dairy Development for improving the milk quality & quantity as well as oversee .... To know more view https://bit.ly/3dAjWqq.

Online meetings are available only for Premium Members

Talking to

Dr. Hema Yadav

Director
Vaikunth Mehta National Institute of Cooperative Management

How is VAMNICOM playing an important role in the development of Cooperative Sector?

VAMNICOM, Pune plays an important role for training and development of cooperative sector in the country. The Institute organizes international and national level training programmes on various areas of cooperative management for the in-service officers of Cooperative and Government Department. The institute conducts management development training programmes in various functional areas of management.

Please share the details of different training programs, whom it benefits.

VAMNICOM has four long duration programmes viz. (a) PGDM – Agri Business & Management (ABM) which is equivalent to MBA degree for fresh graduates (b) DCBM programme for in-service officers working in cooperatives and (c)Diploma in Management of Computer Operations for middle level and operational level personnel's in the cooperatives (d) an International Online programme on Agri-business Entrepreneurship is offered as a week end programme for in service personnel's.

Regarding other programmes which includes (short term Management Development programs, webinars & workshops), the institute has conducted 136 programmes and trained 4168 participants during 2019-2020. Out of 4168, 255 participants are from SAARC countries.

You mentioned about PGDM-ABM, how has VAMNICOM become the preferred educational institute for ABM aspirants?

PGDM-ABM programme is one of the most popular among the youngsters which is approved by AICTE and recognized by Association of Indian Universities as equivalent to MBA degree & it has got accredited by National Board of Accreditation, New Delhi. The programme has got industry acceptance which is reflected in our 100 per cent campus placements.

Also VAMNICOM has a very strong and prosperous alumni network who are successful and working at good positions in different Agri input companies as well as banking, microfinance and other sectors. The institute is very active on the various online tools in today's world which keeps the alumni network intact and opening window of opportunities.

As per the guidelines of AICTE, the institute accepts national level test scores such as CAT, MAT, XAT,ATMA,CMAT & GMAT for taking admission in PGDM ABM program.

On what basis do you claim VAMNICOM claims to be among the top-ranked Agri-Business schools in the country?

Very few programmes in the country has got National Board of Accreditation status for their programmes in Engineering, pharmaceutical and Management subject areas. National Board of Accreditation, New Delhi has granted accreditation to two year full-time residential Post Graduate Diploma in Management – Agri Business & Management programme from 1.7.2015. This has been regularly inspected and extended up to 30.6.2022.

Association of Indian Universities (AIU) has granted MBA equivalence status to PGDM-ABM programme from the year 2001 onwards. Now MBA equivalence status of AIU is connected with NBA Accreditation status.

How has VAMNICOM leveraged institutional linkages through consultancy?

The Institute undertakes research projects sponsored by various institutions such as NABARD,IFFFCO including Government of India projects and also engages in consultancy services for various sectors of cooperatives viz., banking, sugar and dairy for IT implementation, recruitment of qualified professional manpower, defining job responsibilities of manpower in IT departments. VAMNICOM has successfully completed manpower recruitment assignment for few cooperative banks & NAFED during 2020.

How is Post Graduate Diploma in Cooperative Business Management enhancing competencies of practicing managers of cooperatives?

This course enables participants from

Topper of PGDM-ABM 2018-20 batch - Receiving award from Honourable Governor of Andhra Pradesh

Dr. Rajagopal, Professor and National Researcher, EGADE Business School, Mexico

Talking to

the Co-operative and allied areas to equip with the appropriate managerial know-how to meet the emerging challenges of today's business environment. The curriculum of the PGDCBM consists of the six modules with Five weeks' intensive on-campus Teaching – Learning sessions and field visits. In view of the current pandemic situation, the entire PGDCBM programme is offered as online mode.

What kind of research projects are currently being carried by the Institute?

VAMNICOM through its "Centre for Research and Publication" formulates policies to nurture quality research culture and facilitate research endeavors. The Institute provides consultancy in various areas of Management to the user organizations through its Action Research Programmes. The institute has completed 18 Consultancy projects in the area of collectives - Cooperatives, Micro Finance and Farmer Producer Organization in the previous year. The research activities are supported by NABARD, NCUI, Ministry of Agriculture & Farmers' Welfare.

The Institute is a recognized Research Centre for conducting research leading to the award of Doctorate Degrees of Savitribai Phule Pune University in the faculty of Commerce and Management with the subjects Financial Management and Computer Management.

What has been the response received by the institute for the Memorandum of Understanding (MoU) signed with various Institutions in India and neighbouring countries for maximising organization of exchange training programmes pertaining to management and development of cooperatives?

VAMNICOM has entered MoUs with eight institutions during 2020. Some of the MoUs are renewal of old association. The details are -

1. MOU with Kolhapur Urban Cooperative Banks Association for recruitment and training programmes

2. Renewal of MOU with National Cooperative College, Mauritius for collaborative training, research & Consultancy services

3. MoU with National Institute of Cooperative Development, Polgolla, Sri Lanka to conduct collaborative training, student exchange programme and Research and consultancy projects.

4. MoU with Agricultural Development Bank Ltd., Nepal for conducting short and long term programmes, study visits/ exposure visits, collaborative programmes, Training of Trainers, Research and consultancy.

5. Banking Finance and Insurance Institute of Nepal Limited For conducting and coordinating in the areas of training, education, research and consultancy services, information technology and other allied services.

6. MoU with Charotar University of Science and Technology (CHARUSAT), Gujarat to collaborate and cooperate in the areas of training, education and 6other knowledge based activities.

7. Yashvantrao Chavan School of Rural Development (YCSRD), Kolhapur for Research, training programmes, student exchange programmes

8. L J University, Ahmedabad to collaborate and cooperate in the areas of training, education and other knowledge based activities

Do you have any professional chair/association with the industry in your institute?

Yes, the institute has Indian Farmers Fertilizer Cooperative sponsored IFFCO chair which is functional for more than four decades. The institute is in the process of reviving NABARD sponsored chair for undertaking research related to agriculture credit.

What are the activities undertaken under IFFCO chair at VAMNICOM?

In order to promote agricultural research and cooperative education in the country, Indian Farmer Fertilizer cooperative(IFFCO) has established IFFCO chair in the institute. This is an outcome of partnership between scientific researchers from both industry and academia to drive innovation in the agricultural sector. Over the last 40 years, the collaboration between VAMNICOM and IFFCO has resulted in developments into practical applications that benefit their programs and members through its research and training. The mutually beneficial partnership has produced groundbreaking research

International Day of Cooperatives

New hostel building inaugurated in November 2020

and innovation that solves complex problems, drives economic growth, and creates a more skilled workforce.

How does VAMNICOM outreach Self Help Groups and Women producers group?

VAMNICOM is undertaking training, research and consultancy in various aspects relating to women development, SHG and micro finance. Institute has created to design, plan and execute programmes of training and research in various fields of women and SHG. Institute has published a manual on Gender Sensitization and Women Empowerment in Co-operatives (Centenary Celebrations). It is collaborating with Ministry of Women & Child Development, GoI, Rastriya Mahila Kosh, Maharashtra State Commission for Women, GoM, Mumbai, National Commission for Empowerment of Women, New Delhi, NABARD, NAFCUB & others. VAMNICOM is also a recognized consultant of Government of India for evaluating women's dairy projects in the country.

Some of the most notable programmes in this regard have been financial literacy programmes for women in development sector in collaboration with NABARD, leadership and governance programme for Maharashtra State Rural Livelihoods Mission and cooperative business management programme for Uttarakhand State Government Livelihood Collectives and Cooperative Societies (Supported by IFAD).

The institute also undertakes timely and contemporary research on women collectives and cooperatives to study the various issues like rural entrepreneurship, rural banking and microfinance, financial inclusion, governance etc. and to document the best practices in the field of agriculture and rural development.

In terms of your faculty, what are some of the strong areas of capabilities available? What are the areas where you feel there is still a shortfall of capabilities?

The faculty at VAMNICOM are assemblage of fine academicians with rich experience in the co-operative sector. The ability of the faculty members to work in synergy with a wide spectrum of collaborators in this field from local to international level makes them stand out. There is not any shortfall necessarily but the faculty can be definitely encouraged to take their proficiency to new heights with innovative and diverse techniques in their training and research activities, contributing towards making the institute the Centre of Excellence. In addition to internal faculty members, experts are invited for offering special sessions.

What are the main challenges faced by the cooperative model today and how does this affect VAMNICOM?

The Covid-19 pandemic situation is having an unprecedented impact on the various cooperative models and the overall businesses as well. Lack of technological innovations and poor information dissemination system have adversely impacted the cooperative sector. Amid these current circumstances, VAMNICOM feels there is a need of strengthening existing business models and exploring new and untapped opportunities for capacity building & technology transfer to the grass root levels of cooperative societies. Moreover, the institute has already been sensitizing people through its training programmes about the Information Technology sector and how it has become a necessity in the development of the agricultural cooperatives and rural financing institutions. VAMNICOM has outreached its stakeholders through webinars and online programmes.

In the wake of several reforms in Agriculture, Banking & coop sector how has VAMNICOM played an important role?

VAMNICOM has played an instrumental role in the ongoing reforms by facilitating development of skills, building market linkages, inculcation of cooperative entrepreneurship, and promoting innovation especially in financial & digital inclusion areas.

What is the roadmap of VAMNICOM for future pathways?

The operational excellence of an institute can be achieved through a proper academic and administrative environment. VAMNICOM which deals in the unique area of cooperation since inception in 1947 in the country has expanded its focus to Agri business sector from 2004.

Further the focus has been enlarged now to collectives- in addition to cooperation, Self Help Groups and Farmer producer organizations. In order to meet the training mandate of Government of India in the areas of FPOs, livelihood missions & skill/ entrepreneurship development, the Institute envisages further diversification of training programmes through the introduction relevant certificate/diploma programmes in the referred areas. In a nutshell, the vision is to make the Institute a Centre of Excellence for cooperatives in the country.

Contact : cme@vamnicom.gov.in

Talking to

Mandeep Verma

Founder, Swaastik Farms,
Solan, Himachal Pradesh

Mr Mandeep Verma is the founder of Swaastik Farms, Solan, Himachal Pradesh, and is into cultivating kiwi fruit, apple, and other crops using SPNF practices. He also propagates kiwi fruit plants and sends them to Uttarakhand, Uttaranchal, Himachal, and other North-eastern states. They follow 100% environment friendly cultivation practices and work with holistic approach towards sustainable agriculture.

About his farm, Swaastik Farms, Mr Mandeep says that once the fruits are cultivated, they are packed in crates for wholesale and in attractive small packaging for retail sale. They are preferred by people as Diwali gifts, and these packages come with details of health benefits. The fruits are also packed in biodegradable bags with Kiwi fruit recipes on the bags. These fruits boost the income of the farm. They also have a nursery system that provides quality seeds to be sent abroad. The farm follows multi-cropping strategy to increase the income.

Mr Mandeep in a recent interview talks about Kiwi fruit cultivation, marketing, and the economics involved in the process. It is in the recent years that Kiwi fruits have gained popularity in India because of the adaptation to climate, yield per acre, nutritive value, low infestation, and pest and disease. The fruit was earlier known as Chinese Gooseberry but was renamed as Kiwi in New Zealand in the year 1959. The plant grows in land 900 to 2600 metres above the sea level. It requires well drained soil and below 35 degrees Celsius of temperature with chilling hours of about 700 hours minimum.

The fruit is a rich source of Vitamin C and E and has lots of health benefits. In 100 g of Kiwi, you will find 64 mg of Vitamin C. They are highly nutritious too. After 7 to 8 years of plantation, each vine gives about 80 kgs of fruits. They are harvested between October to November each year when it is a lean period for other fruits. They start ripening after 15 to 20 days of harvesting from the vines. The fruits do not require any sophisticated packaging and can be sent to other places. They can also be stored in room temperature and 5 to 6 months in cold storages. The main varieties of the Kiwi fruits are Allison, Heyward, Monty, and Bruno, and they vary in size and taste.

Mr Mandeep points out that it was in Lalbagh in Bangalore that the fruit was first cultivated in India in the year 1960. But due to insufficient chilling hours, it was later stopped. The second successful trial was done in Shimla in 1964. With scientific packages and practices, the fruit cultivation has now been extended to mid hills of Himachal Pradesh, Uttarakhand, Jammu and Kashmir, Arunachal Pradesh, Sikkim, and Meghalaya. They help in boosting the income of farmers in these region who also grow apples and plums.

The Kiwi is a fruit for mid hills. We have to align the orchard for getting the maximum penetration of light and air. Pits are prepared and mixing of farmyard manure and filling are done by December. Kiwi fruit vines are trained on two types of trellis T Bar and Pergola. January is the ideal time for planting. Soil has to be firm around the roots. We need 9 female plant to 1 male plant for pollination. Male flowers like tamouri, and allison help in pollinating. Flowering happens in March. The fruits are delicious, and interplanting is economical.

Mr Mandeep talks about the three methods of propagation. Hardwood cutting involves wine being propagated with rooting hormone. Softwood cutting is done in summer and the saplings

Talking to

are planted in greenhouse for rooting. Grafting on rootstock helps in seeds being germinated and grafting of desired species like Allison and Hayword are done on that plant. When the space is narrow and land sloping, we can go for T type training system, the name being derived because of the shape. Pergola system is followed when there is more space for the plant, and more fruiting wine can be taken in this system.

Talking about the marketing perspective, Mr Mandeep says that the share of Indian fruit production in the year 2012 was 227 mn ton. Kiwi holds a negligible share in this with an output of 77 mn tons. These fruits are majorly produced in Arunachal Pradesh, Sikkim, Himachal Pradesh, and Jammu and Kashmir. They are also imported from countries like New Zealand, Italy, and Chile.

He indulges into the SWOT analysis and focuses on the heavy regions because the cultivation is more extensive in these areas. It is because the governments encourage Kiwi cultivation and offer 50% subsidy of the total cost incurred. The large quantity and good quality Kiwi fruits production may be due to emergence of the agricultural practices in Himachal Pradesh, Uttarakhand, and Arunachal Pradesh. They have started producing 8 to 10% more annually now. The weaknesses of the industry are the lack of infrastructure, supply chain issues, and training and development of farmers. Since the fruits are new to the region, it is difficult for the department and minds of the people to adapt to the new crop. There is a lot of opportunity for the growers as the import of fruits from New Zealand is quite huge and the price is also high.

The cost of cultivation of Kiwi fruits can be high too. Organized retail sales of the fruits through retailers such as Big Bazaar is growing, and the fruits can be easily sold to these retailers. But the main threat is we are still in the developing phase and the quality is different from the imported ones. There is a lot of competition from other countries too. These countries have been growing Kiwi from the last 100 years, but India is just evolving in this. There is lot of competition for international brands like Chile.

How many acres do you have under cultivation and what is your yield per annum?
Area under cultivation is 3 acres, current yield per annum is around 6 to 7 tonnes (as the orchard is in nacent stage, post maturity production may increase to 50 tonnes.

When does the yield start? Can you send to Hyderabad in bulk?
Yield starts in 3rd year post plantation but reached peak in 9th year onwards. Yes , yield can be sent in bulk to Hyderabad.

Do you have enough production to supply in Southern Countries?
Yes, subjected to demand.

Compared to imported Kiwis how do the Himalayan Kiwis fare?
Himalayan kiwi are much tastier than imported one.

In South India, are any farmers cultivating Kiwi fruit?
No, as its not feasible due to climate.

Is there any difference in nutritional value in the Indian fruits and imported Kiwis?
No, but taste differs due to growing conditions and fresh availability.

How do you plan to meet the demand and supply gap in the country?
Currently demand is on the higher side than production. Our focus is to increase the area under cultivation and get higher yield per acre of land.

What are the issues you face currently and what is your prediction about Kiwi cultivation in future?
Only issue faced by Indian grower is the import of substandard unriped kiwi from Chile, this creates a glut in the market, consumer creates dislike for kiwi due to substandard kiwi and Indian kiwi grower suffer the hit on price.

Do you call Kiwi a seasonal fruit?
Yes it is , but round the year availability can be maintained with proper storage.

Is there any value added product from Kiwi fruit?
Yes, it can be processed to various forms like juice, crush, dry kiwi, oil etc.

Which part of Himachal Pradesh are you from? Do you allow visitors to your farm?
I am from Solan Dist. , Yes visitor are welcome through appointment only.

What are your plans for your farm in future?
We plan to venture into agro tourism and processing of our produce.

Do you have a nursery of your own, and do you supply saplings of Kiwi fruits?
Yes, our nursery is registered by Dept. of Horticulture, Himachal Pradesh. Yes, we do supply kiwi saplings.

What is your earning from the last 3 years for the Italian type of Kiwi fruits per acre?
No comments, but decent enough.

For how many years will the Kiwi wine yield fruits?
For 80 plus years, depends upon the plant health.

In a perfect condition, what is the number of fruits you can get in a Vine?
80 – 100 kg (800 -900 fruits)

Do you follow any specific plucking method to get the Kiwi fruits?
No , they are plucked via hands only.

sent to retail outlets to hotels, cafes, and restaurants.

The target market are institutional 5-star hotels, food processing industries, cafes, ice cream parlours, and organized retailers. The target markets include consumers who are health conscious and females. For market development, the growers also focus on exploring in new geographical areas like Delhi, Kolkata, Guwahati, and Shillong.

The environmental analysis for the Kiwi fruits comprises of 5 parts majorly – political, economical, sociocultural, technological, and legal. The per capita income of India has increased, and this gives more buying power to people. Since Kiwi is in the market during the lean season of other fruits, especially during Diwali and Navaratri, people have started buying Kiwi gift packs than dry fruits. Under sociocultural part, people are willing to buy healthy fruits and buying and consumption of Kiwi fruits has increased. These are very good for health. Technologically, improvement of ecommerce and supply chain have improved the income of the farmers. Legally, the growers have to follow the regulation of health and safety laws and environmental regulations.

The supply chain helps supplying fruits from growers to wholesalers, and fruits are also imported from countries like New Zealand and Chile. They are also supplied directly to hotels and cafes. The supply chain infrastructure includes collection centres, packing houses, packing infrastructure, and cold storage. It also comprises of transportation by trucks and trains. They are

On product development, Mr. Mandeep says that they are trying to come up with new varieties of Kiwi fruit and have tied up with FMCG and fragrance industries for supply of processed Kiwi oil. They also are working on upgrading the quality of handling during harvesting, processing, and packaging. They are also keen about getting international certification of Kiwis for exports.

Kiwis were earlier packed in crates of 20-25 kgs and supplied to distributors. Now each package contains 30 to 33 pieces and also gift packages are designed. Channels of distribution are supply through online marketing directly and indirect means of wholesalers, retailers, and fruit processing industries. People also have started adapting strategies like gifting and sign-up rebates. They also follow promotional methods to visit and participate in trade shows of hotel industries, retail, packaging, agriculture, farming, bakery, food and food packaging and processing sectors. They are also using social media as platform to create awareness among consumers. The digital initiatives to boost up the industry, brand building, creating consumer awareness, and research are through social media platforms like Facebook, Twitter, LinkedIn, YouTube, and other blog websites.

Elaborating on the economics of Kiwi cultivation, Mr Mandeep says that the set-up cost per vine is Rs. 4200 including plat cost, structure cost, and maintenance cost for 2 years. High yield and less prone to disease make it a good choice for farmers. Capex and Opex help get high price for the product in the market. The Kiwi fruits are called medicinal plants to cure many illnesses. In the market it is Rs. 25 per piece depending on the place and time of the year, but for us the average price per kg is Rs. 150 to 350. The advantage is there is very limited area of cultivation due to specific temperature requirements. The average plant life is more than 80 years, and Kiwi is no doubts a boon to the hilly regions.

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