

VSI Bulletin

Dedicated service to sugar industry since 1975

Vol. 11, Issue - 4, January, 2012

Quarterly For Private Circulation Only



**VASANTDADA
SUGAR
INSTITUTE**

Foreword...

As the new year begins in style, I wish all our readers happy and prosperous year ahead in 2012. The new year brings new ideas, new goals and new hope to achieve. It also gives a chance to look back at our achievements during the last year and introspect.

The last quarter of 2011 saw few of very important events of the year. These include 36th foundation day of the Institute celebrated on 19th November 2011. It was a rare treat for all scientists, technologists, engineers and staff to have two accomplished persons Dr. Ashok Kolaskar, the pioneer of bioinformatics in India and Shri. Shankarraoji Kolhe, founder trustee of VSI sharing the dais on this memorable occasion.

Another key event the 35th Annual General Meeting of VSI was held in the last week of 2011. The function is vital where deserving factories, distilleries, staffs and sugarcane growers are awarded for excellence at the hands the chief minister.

The last quarter also saw surge in training activities with successful conduct of Dnyanlaxmi and Dnyanyag training program for women and men farmers respectively. Institute's prowess in providing training to the sugar industry personnel is appreciated by sugar corporations from abroad. VSI provided an onsite tailor-made program for the Fiji Sugar Corporation. A training program for 28 sugar factory personnel of Ethiopian Sugar Corporation is also in progress at VSI.

The current issue will provide details on such training programs imparted and seminars attended by the Institute's representatives nationally as well as internationally.

Wishing once again a very happy & prosperous new year 2012. I welcome feedbacks & replies from all our readers.

(A. A. Prabhavalkar)
Editor



FLASH NEWS

Farewell



Mr. V G Chikhalikar, Technical Advisor and Head, Sugar Engineering Department, retired on 30th November after serving in the Institute for the past 29 years. We wish him a good health and happiness ahead.

Congratulations



K R Patil

Mr. K R Patil, Technical Advisor has been appointed as Head of sugar Engineering Department w.e.f. 01st December 2011. Mr. Patil, a ME-Mechanical Engineer has a vast experience in the sugar industry and has been with the Institute for more than 20 years. Congratulations and best wishes to Mr. Patil.



M C Pagariya

Ms. M C Pagariya, CSIR-SRF, Molecular Biology & Genetic Engineering Department (MB&GE), has been awarded the Degree of Doctor of Philosophy (Ph.D.) in Botany for the thesis entitled "*Candidate genes as molecular markers for evaluating and validating sugarcane germplasm for salinity stress*" by Shivaji University, Kolhapur. She worked under the guidance of Dr. R M Devarumath and Dr. P G Kawar, both scientists at VSI's Molecular Biology & Genetic Engineering section.



Mr. M Vamdevan, PS to DG and Mr. I E Satav, Attendant, Estate Section received best employees' of the year 2010-11 awards at the hands of Shri. Prithviraj Chavan, Chief Minister of Maharashtra State. Congratulations to both of them.

NEWS



Project from DAE-BRNS

The Department of Atomic Energy, Board of Research in Nuclear Science DAE-BRNS has sanctioned a project on “Enhancement of biodegradability of distillery spentwash by gamma irradiation” to the Department of Environmental Sciences with a grant of Rs. 24.33 Lakhs for a period of three years. Dr. Deepali Nimbalkar is the Principal Investigator of this project.

Training Program for Ethiopian Sugar Corporation

Ethiopian Sugar Corporation (ESC), Addis Ababa, Ethiopia owned by the Ethiopian Government had requested to arrange a tailor-made training program for their technical staff. The technical staff, twenty eight in total are from various disciplines viz. sugar technology (05), sugar engineering (09), agronomy (05), instrumentation (05) and researchers (04) and work at different sugar factories in Ethiopia. VSI has prepared a tailor-made training program to suite their requirement comprising lectures, practicals and sugar factory training. The training program been started on 12th December 2011 and will continue for next six months. The program is going on as per the schedule of various disciplines. The various disciplines and students studying are as under.

Environmental Sciences study tour

The region of South Karnataka offers an opportunity to study an amazing variety biodiversity in rainforest, marine ecosystems and hills. The Department of Environmental Sciences organized a study tour to the Sharavati forest in Karnataka, Murudeshwar and Madikeri. The students observed the wide variety of flora and fauna and



birdlife in the Sharavati forest through nature trails, night walks and jungle rides. They could observe the marine ecosystem at Murudeshwar along with visiting the temple of Shiva. At Madikeri in Coorg, the students were taken to a coffee plantation, a nature reserve and an elephant camp. They could experience nature very closely and hone their scientific communication with discussions on the topic of animal behavior, bird watching and identification of birds, plant, and rock species.

Women Farmer's Training Program at Rajarambapu Patil SSK Ltd.



Rajarambapu Patil SSK Ltd., Islampur, Sangli (RBPSSK) sugar factory has concentrated its efforts on increasing sugarcane productivity in their operational area. Recently under the guidance and support of VSI, the factory has implemented sugarbeet cultivation program as a supplementary crop in different planting seasons. The sugar factory has erected many co-operative lift irrigations schemes and co-operative societies in the operational area. Besides it is implementing various sugarcane development schemes and developed sufficient raw material in their operational area itself.

As a part of their human resource development program and considering the importance of women in development of agriculture in rural area, the factory organized a two day training program for women farmers. The program was organized at Rajarambapu Institute of Technology (RIT), Islampur on 18th and 19th November 2011. Total 75 participants took advantage of this interactive training program.

Agricultural Scientists from VSI delivered lectures to the participants with audio-visual aid on integrated nutrient management for increasing soil fertility and productivity, improved agronomic practices for obtaining 100 tons per acre sugarcane productivity and integrated insect-pest and disease management in sugarcane. The Chairman and Managing Director of RBPSSK appreciated VSI's co-operation in every endeavor of the sugar factory. The participants expressed satisfaction and requested factory management to conduct such training programs at least once every year.

Training program on Social Impact Assessment

Social Impact Assessment (SIA) is an important tool to inform decision makers, regulators and stakeholders, about the possible social and economic impact of a proposed project. To be effective, it requires the active involvement of all concerned stakeholders. It is an important part of the Environmental Impact Assessment process. Dr. Deepali Nimbalkar attended a training program on Social Impact Assessment at the Centre for Science and Environment, New Delhi from 9th–11th November 2011.

Inauguration Function of 30 KLPD Rena Distillery



Mr. R V Godage, *Scientist, Department of Alcohol Technology* attended inaugural function of newly installed 30KLPD distillery unit based on the latest technology of continuous fermentation and multi-pressure distillation at Rena SSK Ltd., Latur on 4th November 2011.

Mr. Godage gave presentation on cascade continuous fermentation and multi-pressure distillation to the chief guest, Shri. Vilasraoji Deshmukh, Minister of Information and Technology, Government of India (GoI), Shri. Balasaheb Thorat, Revenue Minister, Government of Maharashtra, Mr. Dilipraoji Deshmukh, Founder Chairman, Rena SSK Ltd. and

other guests. The chief guest and management of Rena SSK Ltd. thanked VSI for their valuable guidance provided during erection & commission of the distillery and effluent treatment plants.

Farmers Training Program at Ajinkyatra SSK Ltd.

Farmers training program on *Integrated Nutrient Management* in Sugarcane was conducted at Ajinkyatara SSK Ltd., Satara on 14th October 2011. The program was organized by VSI under a research project funded by International Plant Nutrition Institute (IPNI) and Bellarusian Potash Co. Ltd., Singapore.



Mr. Rambhau Jagdale, Chairman, Ajinkyatara SSK Ltd. was the chairperson for the inaugural session and Dr. R B Deshmukh, Director, Agriculture Sciences and Technology, VSI inaugurated this training program as the chief guest. Total 120 progressive cane growers from the operational area of Ajinkyatara SSK Ltd. attended the training.

In his inaugural address, Dr. R B Deshmukh explained importance of integrated nutrient management for increasing sugarcane productivity and made plea to sugarcane growers to improve sugarcane productivity



with minimum cost of cultivation for better profitability. Mr. Rambhau Jagdale, Chairman elaborated the present problems like increasing cost of cultivation, harvesting charges, and constraints in mechanical harvesting.

Mr. D B Phonde, Scientist and Head, Soil Science Section presented the activities of research and extension under the project funded by IPNI and explained the fertilizer management program with organic, inorganic and bio-fertilizer under integrated nutrient management system. Mr. A S Deshmukh, I presented information on drip irrigation in sugarcane and explained the techniques of fertigation in particular. Mr. R G Yadav, Scientific officer and Head, Entomology Section explained pest and disease management in sugarcane. Mr. S S Kapse, Managing Director, also gave information on the cane development activities being implemented in the operational area of sugar factory.



After training program, Dr. R B Deshmukh visited field experiments on inventory of available potassium status and modeling its relationship with potassium content, yield and quality of sugarcane for site specific nutrient management in sugarcane growing soils of Maharashtra.



EVENTS



35th Annual General Meeting and Awards Ceremony 2011



35th Annual General Meeting (AGM) of VSI was held on 26th December 2011 in conjunction with 55th AGM of Maharashtra Rajya Sakhar Karkhana Sangh Ltd. (MRSSK), Mumbai at the premises of the Institute. AGM of VSI is the biggest program held every year during the month of December. Shri. Sharadchandraji Pawar, Union Agriculture Minister, Government of India and President, VSI was present along with other dignitaries Chief Minister Shri. Prithviraj Chavan, Deputy Chief Minister Shri. Ajit Pawar, Speaker of State Assembly Shri. Dilip Walse-Patil, President of MRSSK Shri. Vijaysinh Mohite-Patil and other state ministers' viz. Minister of Co-operation Shri. Harshawardhan Patil, Minister for Rural Development Shri. Jayant Patil, Minister of Revenue Shri. Balasaheb Thorat and Tribal Development Minister Shri. Babanrao Pachpute.

Analytical publications on the comparative performance of Maharashtra Sugar Industry and Distilleries were released on this occasion. The publications – 'Technical Performance of Sugar Factories in Maharashtra, season 2010-2011',

'Financial Performance of Co-operative Sugar Factories in Maharashtra' and 'Technical Performance of Co-operative Distilleries in Maharashtra' for the financial year 2009-2010 were released at the hands of the chief minister, Dy. chief minister and minister for co-operation.

Shri. Pawar in his address to the dignitaries and members said that the Board of Directors of sugar factories and the member sugarcane growers should decide on the sugarcane price paid as they have the practical knowledge of sugar production, cost and market and it's not the job of state government, chief minister, co-operation minister. In case if a sugar factory fails to pay the promised rates that are more than its capacity, the state government will not help to recover their

losses. The state government will have lesser say in the functioning of co-operatives. He also indicated that an amendment in the constitution has been passed in the loksabha w.e.f January 2012 regarding the co-operative societies. Shri. Pawar assured that provision will be made for sugarcane harvesters in the twelfth five year plan.



The chief minister Shri. Prithviraj Chavan in his speech insisted that due to less rain this year, the sugar production will be less and due to open market the central government should open the international market for the exporters without restrictions on export. The crushing of sugarcane in the State will be complete by April end and there would be no sugarcane stock left.

In the general body meeting, Shri. Shivajirao Deshmukh, Director General (DG), VSI said that there is a huge demand for technical guidance from sugarcane cultivators of other states like Uttar Pradesh, Jharkhand, Bihar and Karnataka. Though they are in touch with the Institute, in coming years VSI will cater to their demands for technical guidance outside Maharashtra officially.

At this ceremony, VSI presented awards to the best achieving sugar factories, distilleries, technologists as well as sugarcane growers. Jawahar Shetkari SSK Ltd. won total four prestigious awards for best overall sugar factory, best financial management, best managing director and best chief engineer. Loknete Baburao Patil SSK Ltd. and Vitthalrao Shinde SSK Ltd. received most innovative factory and best distillery awards respectively. The State level Oos-Bhushan awards for the best sugarcane growers went to Mr. M R Khot, Mr. S P Chougule-Mohite and Mr. S R Sid for achieving the highest 336.35 (pre-seasonal), 272.49 (suru) and 285.04 (ratoon) tons per hectare cane yield respectively. At this occasion, Mr. M Vamdevan, PS to DG and Mr. I E Satav, Office Attendent at Estate Section received best employees' of the year 2010-11 awards for their dedicated and sincere work.

Awards for Excellence



Late Vasantdada Patil Award For Best Overall Performance –
Jawahar Shetkari SSK Ltd., Dist.: Kolhapur



Most Innovative Factory Award
- Loknete Baburao Patil SSK Ltd., Dist.: Solapur



Best Distillery Award
- Vitthalrao Shinde SSK Ltd., Dist.: Solapur



Best Managing Director Award
- Mr. M G Joshi, Jawahar Shetkari SSK Ltd., Dist.: Kolhapur



Best Cane Development Officer

- Mr. N K Pawar, Ajinkyatara SSK Ltd., Dist.: Satara



Best Chief Engineer

- Mr. S S Patil, Jawahar Shetkari SSK Ltd., Dist.: Kolhapur



Best Chief Chemist

- Mr. M D Narute, Vitthalrao Shinde SSK Ltd., Dist.: Solapur



Best Chief Accountant

- Mr. M C Atkare, Vitthal SSK Ltd., Dist.: Solapur



Best General Manager Distillery Award

Mr. D D Patil - Kumbhi Kasari SSK Ltd., Dist.: Kolhapur



Late Yashwantrao Chavan Award

- Mr. M R Khot - Sharad SSK Ltd., Dist.: Kolhapur



Late Vasantrao Naik Award - Mr. S P Chougule-Mohite
Shree T Kore Warana SSK Ltd., Dist.: Kolhapur



Late Annasaheb Shinde Award

- Mr. S R Sid - Shree T Kore Warana SSK Ltd., Dist.: Kolhapur

Training Program for Fiji Sugar Corporation (FSC), Fiji



A VSI team comprising of two sugar technologists – Mr. R V Dani, Mr. J N Bhaumik and two sugar engineers – Mr. R A Changude, Mr. S B Thorat conducted an on site training program at Fiji Sugar Corporation from 1st to 16th December 2011. The training program was attended by 22 technical staff members of four sugar factories of FSC and covered following subjects;

Sugar Technology : basic chemistry of sucrose, world sugar scenario, raw sugar, refined sugar, decanter technology, mill sanitation, evaporation, burnt cane, pan boiling, scale in evaporator, and evaporator configuration.

extraction, power requirement of mills and off season maintenance of milling section.

Boiler : boiler classification & types, fuels & combustion, losses in boiler, boiler efficiency calculation with different methods, boiler efficiency improvement, steam to fuel ratio calculations, ID/ FD fan capacity calculations, economizer & air heater calculation, boiler accessories & mounting, turbine classification & different types and turbine cycles & specific steam consumption calculation.

The chairman of FSC congratulated VSI team for great success of the program and expressed desire to sign



Sugar Engineering : Cane Handling & Cane Milling- cane preparation & devices, cane milling, pressure feeding, mill hydraulics, mill capacity, mill setting, milling efficiency improvement by brix curve, mill

a five year contract with VSI for training of their technical staff.

International Consortium for Sugarcane Biotechnology (ICSB) Business Meeting-2012



Shri Shivajirao Deshmukh, Director General and Dr. R B Deshmukh, Director, Agricultural Sciences & Technology, VSI attended the business meeting of ICSB held at South African Sugarcane Research Institute (SASRI) of South African Sugar Association (SASA) at Durban held during 4th to 9th December 2011. In all nineteen delegates from ten institutions of eight countries including the host country participated in the meeting.

The meeting was chaired by Dr. Paul Moore, the Corresponding Secretary, ICSB at Palm Dune Conference Centre, Durban on 05th December 2011. Dr. Carolyn Baker, Director and the scientists from SASRI presented an overview of South African Sugar Industry and the sugarcane research at SASRI. On December 6th and 7th, the meeting continued at Ntshondwe Camp Conference Centre of Ithala Game Reserve where the ongoing research projects viz. Extent of homologous sequence variation in sugarcane by Dr. Angelique D'Hont of CIRAD, France and Identification of domestication genes for sugarcane improvement by Dr. Ray Ming of University of Illinois, USA were reviewed.

A new research project entitled "Testing New Generation Sequencing (NGS) based methods for high throughput genotyping in sugarcane" presented by Dr. Angelique D' Hont was discussed in detail and was accepted for financial support by some of the members of ICSB. Accomplishments and the impact of various research projects sponsored by the ICSB since its formation were discussed and most of the members expressed satisfaction about the outcome of projects.

On 8th December while on the way back to Durban the delegates visited field trials at Sugarcane Research Station, Pongola, laboratories of biotechnology and tissue culture, photoperiod facilities, germplasm block and hybrid nursery at SASRI, Durban.

Meetings between VSI & National Research Centre for Grapes (NRCG) on M.Sc. Wine Technology Course

VSI had started a Post Graduate M. Sc. Course in Wine Technology (Wine, Brewing and Distilling) from July 2011, affiliated to the University of Pune. In this connection, a team from VSI visited NRCG to explore the possibility of mutual co-ordination in the area of Viticulture & Wine making. The team included Shri. Shivajirao Deshmukh, DG, VSI, Dr. R B Deshmukh, Director, Agriculture Sciences and Extension, Mr. S V Patil, Technical Advisor and Head, Department of Alcohol Technology and Mr. R V Burase, Assistant Technical officer, Department of Alcohol Technology.



From NRCG, Dr. P G Adsule, Director, NRCG, Dr. G S Karibasappa, Principal Scientist (Horticulture), Dr. Indu Sawant, Principal Scientist (Plant Pathology), Dr. S D Sawant, Principal Scientist (Plant Pathology), Dr. Anuradha Upadhyay, Senior Scientist (Biotechnology), Dr. A K Upadhyay, Senior Scientist (Soil Science), Dr. J Sharma, Senior Scientist (Soil Science), Dr. J Sathisha, Senior Scientist (Horticulture), Dr. A K Sharma, Senior

Scientist (PHT), Mrs. S Salini, Scientist (Entomology) and Dr. Rohini Samarth, Scientist (Plant Breeding) participated in the meeting.

VSI team saw various research laboratories and facilities available at the centre. A joint meeting between both teams was held on 30th October 2011 to deliberate participation of NRCG in M. Sc. Wine Technology (Wine, Brewing and Distilling) course.

During the meeting, areas of cooperation for overall teaching program of Wine Technology course were discussed. It was decided that Mr. S V Patil and Dr. Indu Sawant will jointly finalize the details of topics to be dealt by NRCG.

Next joint meeting between VSI and NRCG was held on 28th November 2011, at VSI. Dr. P G Adsule, Dr. Indu Sawant, Dr. R G Somkuwar, Principal Scientist (Horticulture), NRCG visited VSI. At VSI, the NRCG team was highly impressed with the facilities at Departments of Alcohol Technology, Sugar Technology and Environmental Sciences.

It was decided that scientists of NRCG will teach Viticulture, Enology (selected topics), and Food Safety. VSI will request University of Pune (UoP) to include NRCG as its partner in offering M.Sc. Wine Technology post graduate degree course. Both organizations will enlist facilities available at respective institutions. Both organizations agreed to enter into Memorandum of Understanding (MoU) in near future, specifying the areas of co-operation for conducting the M.Sc. Wine Technology course.



4th IAPSIT International Sugar Conference IS-2011

The 4th IAPSIT International Sugar Conference IS-2011 was held at New Delhi during 21st-25th November 2011. Minister for Agriculture and Food Processing industries, Government of India Shri. Sharadchandraji Pawar inaugurated the conference. Mr. Farooq Abdullah, Minister for New and Renewable Energy, Government of India was the chief guest of conference.

The topic of the conference was “Balancing sugar and energy production in developing countries: sustainable technologies and marketing strategies” and organized in four sessions –

- 1) Session-I : Sugar crops: agriculture & mechanization
- 2) Session-II : Sugar crops: breeding and biotechnology
- 3) Session-III : Sugar factory processing, engineering & co-products/ value addition
- 4) Session-IV : Sugar crops: management, marketing and sustainability issues



Representatives from 21 countries participated in this conference and contributed 217 research papers. Total 95 research papers presented were from India followed by 64 papers from China. Scientists from sugar technology, environmental sciences, molecular biology and genetic engineering, plant breeding sections of VSI also attended and presented research papers on various aspects.

In Agriculture session I, total 70 papers presented from agronomy – 35, physiology – 12, soil and microbiology – 10, pest and disease – 10, mechanization – 3. A best paper found was on the topics – crop production in India; Bud chip in China for seed production and drip irrigation.



In Session II, total 34 papers were presented on germplasm resources – 2; commercial breeding – 4, introgression breeding – 5, pollen – 1, energy – 1, genetics – 5, molecular biology/genomics – 8 and tissue culture transmission – 8. Major findings were on MAS in crosses involving different species; diversity and gene cloning; trait associated DNA markers; varietal fingerprinting and innovations in tissue culture etc.

Recommendations made in this conference:

- a. There is a need for molecular biology to work closely with the commercial cane breeders on a routine basis and help to improve the efficiency of germplasm utilization, crossing hybridization and selection to reduce the cycle of release mechanism.

Molecular biologists should also help breeders to select the varieties at the middle stage of the selection of varieties during the varietal development program especially when the variety is in final stage of selection in small scale/lines (stage 5).

- b. Due to extreme (GxE) interactions, commercial clones may perform differently in different environments. Therefore, testing at multiple sites may be essential.
- c. Sugarcane breeders across the globe should freely exchange their germplasm, whether elite or exotic in the form of setts, fuzzi or tissue culture in order to maximize the genetic base of modern sugarcane breeding.
- d. Sugarcane breeders across the globe utilize not only *Saccharum officinarum*, *S.*

spontaneum and *Erianthus* but also should utilize *S. sinense*, *S. barberi* and *Miscanthus* as their basic material in new breeding programs.

- e. Conduct of the training workshop on SSR fingerprinting and its utility in sugarcane breeding is necessary because every clones identity is very important.
- f. More multi institutional collaborations needs to be promoted to characterize complex genome and for development of useful DNA markers for associated traits of economic value.

In the Poster session total 62 posters were placed and the posters were on agronomy – 22, breeding – 10, physiology – 8, PMB&GE – 7, pathology – 5 and tissue culture – 4. **During the Valedictory session, Dr. Solomon, President and Coordinator of 4th IAPSIT declared the research poster entitled – “Genetic improvement of sugarcane as an energy crop” by K V Sushir, R S Hapase and T V Sreenivasan as the “Third Best Poster”.**

Mr. R V Dani, Head, Sugar Technology Department, VSI was the chairman of Session-III. Total 34 papers were submitted for presentation in this session. Fifteen authors presented their papers in 3 groups on—enhancing alcohol production, processing & clarification, energy conservation.



Advisor : Shivajirao Deshmukh
Editor : A A Prabhavalkar
Layout & Photography : Shriram Patil

Committee :
 K R Patil, R V Dani, S V Patil, Dr. D S Nimbalkar,
 A S Deshmukh, M R Shinde, N S Pathan.

VSI Bulletin is published by the Vasantdada Sugar Institute, Pune.

Disclaimer: The views expressed in the articles are those of the authors and do not necessarily reflect the views of the VSI. The publisher makes no representation or warranties with respect to accuracy, applicability or completeness of information. Contents are for reference purpose only. Using it for any other purpose than for which it is shared is unauthorized and prohibited. No material from the issue may be copied, reproduced, republished, uploaded or commercially exploited in any manner without the prior consent of the publisher.
 Copyright © Vasantdada Sugar Institute

Oos-Sheti Dnyanlaxmi and Dnyanyag 2011 - Training Programs for Sugarcane Growers

Every year during the month of November-December VSI conducts training programs for the sugarcane growers of Maharashtra State in the memory of Late Shri. Vasantdada Patil. The programs – Oos-Sheti Dnyanlaxmi and Dnyanyag are organized generally in four batches for women and men farmers

respectively and cover sugarcane cultivation technologies.

This year also Dnyanlaxmi and Dnyanyag training programs were conducted in November-December 2011. The details are as follows:



First Batch

Name of the program	Oos-Sheti Dnyanlaxmi program
Period	13 th to 17 th November 2011
Area from which the farmers participated	South Maharashtra
Number of participants	128
Chief Guest at inaugural function	Dr. Mrs. Savita Mohite Chairperson, Jai social welfare foundation, Rethre (Bk.), Karad, Satara.
Chief Guest at concluding function	Mrs. Snehlata Kolhe, Chairperson

Second Batch

Name of the program	Oos-Sheti Dnyanyag program
Period	22 nd to 26 th November 2011
Area from which the farmers participated	South Maharashtra
Number of participants	232
Chief Guest at inaugural function	Dr. Rajaram Deshmukh Director, Agricultural Sciences & Technology, VSI, Pune.
Chief Guest at concluding function	Shri. Shivajirao Deshmukh, DG, VSI Pune.

Third Batch

Name of the program	Oos-Sheti Dnyanyag program
---------------------	----------------------------

Period	29 th November to 3 rd December 2011
Area from which the farmers participated	Central Maharashtra
Number of participants	201
Chief Guest at inaugural function	Dr. J D Pawar Chairman, Vasandraodada Patil SSK Ltd., Kalwan, Nashik.
Chief Guest at concluding function	Shri. Dinakarbhau More Chairman, Shri. Pandurang SSK Ltd., Shripur, Solapur.

Fourth Batch

Name of the program	Oos-Sheti Dnyanyag program
Period	6 th to 10 th December 2011
Area from which the farmers participated	Vidarbha, Khandesh & Marathwada
Number of participants	226
Chief Guest at inaugural function	Mr. Sudhir Dive Managing Director, Wainganga Sugar & Power Ltd., Bhandara.
Chief Guest at concluding function	Mr. K R Patil Head, Sugar Engineering Department, VSI Pune.

Total 787 sugarcane growers from 41 sugar factories including 29 individual farmers participated in four batches of Oos-Sheti Dnyanlaxmi and Dnyanyag training programs. Shri. Shivajirao Deshmukh and Dr. R B Deshmukh participated in inaugural and concluding functions of these programs and guided the farmers about importance of organizing such programs for increasing sugarcane and sugar productivity.

Lectures and practicals on various topics like sugarcane varieties, seed nursery, tissue culture, planting methods, soil fertility management, irrigation water management, use of bio-fertilizers, farm

mechanization, sugarcane economics, ratoon management, integrated disease & pest management were conducted by agriculture scientists with major emphasis on practicals and field demonstrations.

In specially organized open house discussion sessions question–answer session of every batch, the trainees got their doubts cleared from the subject matter experts. In the concluding function the representative trainee farmers expressed the utmost satisfaction about the training, lodging and boarding facilities. The certificates along with group photographs were distributed to the trainees at the hands of the chief guests.





36th Foundation Day of Vasantdada Sugar Institute 19th November 2011

The Institute celebrated its thirty-sixth foundation day on 19th November 2011. Dr. Ashok Kolaskar, Vice Chancellor at Bhubaneshwar based Kalinga Institute of Industrial Technology (KIIT) was the chief guest on this occasion. Dr. Ashok Kolaskar, a renowned intellectual with numerous accomplishments in bioinformatics research, teaching, mentoring, higher education reforms, and managing large institutions with outstanding success. Shri. Shankarraoji Kolhe, Founder Trustee, Shri. Shivajidada Patil, Trustee, were also present for this program.



The function started with lighting of the lamp by the chief guest after which he was welcomed by Shri. Shivajiroa Patil. Dr. Kolaskar in his address to VSI scientists, technologists, engineers and staff praised the administrative skills of Shri. Shankarraoji Kolhe and Shri. Shivajirao Deshmukh as DG of the Institute. He said that VSI is not a new institution for him but every time that he has visited the Institute he has observed new things and developments. He stressed that when comparing other countries we (Indians) do not make much progress despite having all resources and we should make much more progress.

He then presented a slideshow on Sugarcane Biotechnology. He appealed during the presentation to analyze the humongous data generated due to technology advancement for knowledge generation.

Proper data analysis and interpretation is very important. He pointed his observation that there is exponential growth in Gene Bank, almost doubles in eight months. Modified products will be available in the market for consumers that will change agricultural scenario dramatically. He cited sugarcane development in other countries and explained historical trends in conventional plant breeding with graphical presentations and stats.



He also talked about the role of agricultural science and technology and said that it should work close to farmers. He narrated issues of impact on soil due to herbicides, pesticides, dependence on water, use of solar power, drip irrigation etc. Dr. Kolaskar insisted on research work such as less water dependency by changing genes of plants and still has differentiation and growth. Several genes changed and transgenic plants will have pharmaceutical values by changed properties, better results for farmers. The areas of Maharashtra State should be concentrated and huge data available from satellite needs to be studied.

Mr. V G Chikhalikar, a senior most sugar engineer at VSI was felicitated at the hands of Dr. Kolaskar for his long service for the Institute. Mr. Chikhalikar retired at November end. Shri. Shankarraoji Kolhe shared his cherished memories at the time of foundation of VSI and that was a rare treat for all those present at the occasion.



Visit of Chief Director (Sugar)



Mr Rajan Sehgal, IFS, Chief Director (Sugar), Ministry of Consumer Affairs and Public Distribution, Department of Food and Public Distribution, Government of India visited VSI on 29th December 2011. He made visit to see the Institute's infrastructure, current research & development activities, extension, education and trainings. The chief director visited all technical laboratories and had interaction with scientists and technologists in the technical departments. He was very impressed by visiting tissue culture, microbiology, environmental sciences, alcohol technology, sugar technology laboratories.



Mr. Sehgal at the tissue culture department green house facilities



Ms. Rutuja More giving information on liquid biofertilizer products at Microbiology laboratory



Dr. Deepali Nimbalkar, Dr. Vikram Ghole and DG interacting on the activities of Department of Environmental Sciences



Mr. S V Patil explaining the activities of Department of Alcohol Technology



The Chief Director (Sugar) inspecting R&D related to agricultural engineering at the workshop



Following institutions, Board of Directors, Officers, farmers and students have visited Vasantdada Sugar Institute, Pune to see new innovative technologies developed by VSI and plots of experiments during last three months (October 2011 to December 2011)

Name of Institution	Visitors	Number
November 2011		
Rajshree Sugar and Chemicals Ltd., Tamilnadu State	R&D team	8
Latur Taluka Agriculture Office, District Latur	Officers and farmers	100
Maharani Laxmi Ammani College for Women, Malleswaram, Bangalore, Karnataka State	Faculty and staff	54
Patoda Taluka Agriculture Office, District Beed	Officers and farmers	42
NABARD, Pune	Chief GM, Deputy GM and Officers	38
December 2011		
Yeshwantrao Chavan College of Science, Karad, District Satara	Faculties and students	52
Patoda Taluka Agriculture Office, District Beed	Officers and farmers	49
Deputy Directorate, Kisan Krishi Vikas, Damoh, Madhya Pradesh State	Officers and farmers	20
IFFCO, Pune	Haryana State farmers and officers	19
School of Agricultural Training & Research, Lingraj College Campus, Belgaum	Faculties and students	52
Jawahar SSK Ltd., Hupari, District Kolhapur	Farmers	10
The Mahtma Gandhi sahakare Sakkare Karkhanne (N)Bhalki, Karnataka State	Director and a farmer	2
Vaidyanath SSK Ltd., Pangari, District Beed	Farmers	8
Jay Mahesh Sugar Industries Ltd., Pawarwadi, District Beed	Farmers and officers	52
Central Sugarcane Research Station, Padegaon, District Satara	Sugarcane specialist and scientists	12
Yashvanrao Chavan Institute of Science, Satara	Lecturers and students	53
Poona College of Arts Science & Commerce, Camp, Pune	Faculty and students	72
Fergusson College, Pune	Lecturers	4
Total		647



Library Updates (October-November-December 2011)

- 1) Wine Appreciation
– Vine, Richard P; 2nd Edition 1997
John Wiley & Sons, Inc., New York
- 2) Sugar Industry Technologists, Inc. Vol. LXX;
Publication of Tech. Papers and Proceedings
of the 70th Annual meeting of S.I.T., Inc.,
Canada May 8-11, 2011
– S.I.T., Inc., New York
- 3) Handbook of Brewing
– Priest, Fergus G and Stewart, Graham G;
2nd Edition 2006
CRC and Taylor & Francis, Boca Raton
- 4) Fermentation and Biochemical Engineering
Handbook; Principles, Process Design
and Equipment
– Vogel, Henry C and Todaro, Celeste L;
2nd Edition 1997
Noyes Publications, New Jersey
- 5) Introduction to wine laboratory practical
and procedures (with 50 figures, including 2
colorplates)
– Jacobson Jean L; 2006
Springer Science + Business Media, Inc.,
New York
- 6) Wine production: vine to bottle; food
industry briefing series
– Grainger, Keith and Tattersall, Hazel; 2005
Blackwell Publishing, Oxford
- 7) Biology of microorganisms on grapes,
in must and in wine
– Konig, Helmut; Unden, Gottfried and Frohlich,
Jurgen ; 2009
Springer – Verlag, Germany
- 8) Handbook on chemical industries
(Alcohol Based)
– H Panda
Asia Pacific Business Press Inc.,
Delhi
- 9) The complete technology book on alcoholic
and non-alcoholic beverages (Fruit, Juices,
Whisky, Beer, Rum and Wine)
– NPCS Board of Consultants & Engineers
APBP, Inc., Delhi
- 10) Industrial alcohol technology handbook
– NPCS Board of Consultants & Engineers
APBP, Inc., Delhi
- 11) Handbook on BIOGAS and its applications
– NIIR Board, Delhi
National Institute of Industrial Research,
Delhi
- 12) SISSTA Sugar Journal – 2011 41st Annual
Convention, Vijayawada
– The SISSTA, Tamil Nadu; 2011
- 13) Practical Boiler Water Treatment Handbook
– N Manivasakam ; 2011
Sakthi Book Services, Coimbatore
- 14) Steam Turbine; Theory and Practice
– Kearton, W J; 7th Edition 1988
CBS Publication & Distributors, Delhi
- 15) ICUMSA Methods Book Supplement 2011
– ICUMSA, Verlag Dr. Albert Bartens, Berlin