

"Serving Farming Commu of Goa"

सवादिपत्र NEWSLETTER



Issue - 3 Volume V

(January 2013 to December 2013)



#### From the Programme Coordinator's Desk...

The Krishi Vigyan Kendra (KVK) North Goa attached to the ICAR Research Complex for Goa has been fulfilling its mandated "Transfer of Technology" and its field application through its major technical mandates viz; On Farm Testing (OFTs), frontline Demonstrations (FLDs), and capacity building through On Campus and Off Campus trainings programmes in six disciplines to update the knowledge and skills not only of the stakeholders directly

involved with the testing and assessment of technologies and demonstrations but also thosewho wish to take benefit of these trainings which include Practicing farmers and Farm women, Rural youth and Extension Functionaries from various agencies engaged in agriculture.

It gives me immense satisfaction to bring out this important publication for the period January to December, 2013 which highlights the various activities and technical achievements during the said period. This has been an eventful year with visits of many important dignitaries who visited the Krishi Vigyan Kendra to review the progress of ongoing activities. It is also the period when there was a change in guard after the transfer of the incumbent Programme Coordinator to Srinagar.

The period is of significance because the KVK in addition to it's mandated programmes viz OFTs and FLDs, Training and other extension activities has also created additional facilities under externally funded projects like RKVY and NHM. Besides it has also implemented the GOI programme of Tribal Sub Plan. There has been significant improvement in overall KVK campus and farm and has significantly contributed to additional revenue generation through it's various established units like IATM, IFS, etc. the all the year round vegetable seedling production under polyhouse has been a significant attraction not only from stakeholders but the public at large.

This News Letter briefly highlights the various results of various trials conducted in assessment of the technology on farmer's field with their participation in respective discipline and also documents the success and impact created in respect of technologies popularized through the Frontline Demonstrations in the selected villages besides, showcasing various salient extension activities carried out by KVK during the period. It would be note worthy to mention about the technical publications and media reports published by KVK during the period for the benefit of the public in general and the farming community in particular. It will also be worthwhile to mention that during the period the KVK website www.kvkicarrcgoa.in was made operational along with the farmer friendly KMAS (Kisan Mobile Advisory Service) which I am sure will go a long way in faster communication between the KVK and the user groups.I take this opportunity to thank our Director Dr. Narendra Pratap Singh, for giving full moral and financial support to KVK in carrying out the activities of KVK.

I, sincerely hope that this publication will go a long way in serving as a useful reference material for the Taluka as well as District level extension workers as well as farmers to update them regarding the achievements of Krishi Vigyan Kendra.

imminent Dignitaries Visit to KVK



Hon'ble Shri Bharat Vir Wanchoo, Governor of Goa State visiting Home Science Lab of KVK



Hon'ble Shri Manohar Parhikar, Chief Minister of Goa State visiting KVK Exhibition stall



DDG(NRM), ICAR , New Delhi visiting the vermicompost unit of KVK

### **Technologies Tested, Evaluated & Assessed**

Under it's mandated technical programme, the KVK, conducted 26 On Farm Trials in five crops namely Vegetable Tur (var.BRG-2)(8),Marigold Var. Pusa Basanti(5), Capsicum var.California wonder (2),Aphid management in Cowpea(10) and Koleroga in Arecanut (2) Involving 26 farmers in Dhulapi,Amona,Pilar, Goa velha villages including one trial at KVK campus.



**OFT on "Assessment of planting system for vegetable tur"**, the transplanted system gave mean yield of 27.35 qt/ha with avg.351 pods/plant as against the other methods namely broadcasting the seed (13.6q/ha) and dibbling(17.35q/ha) The cost benefit ratio of 1:4.7 was obtained by transplanted tur technology as against either the dibbling 1;3.4 or broadcasting 1:2.5. The feedback from the trial was that the vegetable tur was a new crop and the incidence of pod borer and mealy bug was severe.

**OFT on "Assessment of Marigold"** variety revealed that the improved variety Pusa Basanti yielded 51q/ha with B:C ratio of 1:2.24 as against the Farmers local variety which gave 33q/ha with B: C ratio of 1:1.65. It was seen that the tested variety Pusa Basanti was sensitive to rain.





**OFT on "Assessment of Capsicum in open condition and Insect proof agronet conditions"** resulted in 174q/ha yield with B:C ratio of 1:1.79 as against open conditions which yielded 86q/ha with B:C ratio of 1:1.50. The incidence of Bacterial wilt disease was reduced to 10% under Agronet condition compared to 20% under open conditions. Similarly, the incidence of leaf curl virus was 25% under open condition

**OFT on "Management of Koleoga disease in arecanut"** showed that phytosanitation, avoiding water stagnation, proper fertilizer application and use of plastic to cover bunches for 4 months before the commencement of monsoon resulted in yield of 4.20q/ha with 2.82% disease incidence as against the recommended practice of spraying Bordeau mixture/copper oxychloride thrice 3.80q/ha.







ICM for popularisation of groundnut variety TG37-A in Dhargal village involving 7 farmers covering 1.6 ha resulted in 18.9q/ha yield under rainfed conditions with 43.62% yield increase over farmer's practice. The improved practice gave 85-90% germination as against 65-70% in farmers practice with 5-7% incidence of leaf spot compared to 20-25 % in farmers practice. The FLD gave a net return of Rs 42,400/ha with B:C ratio of 1:2.78 as against the farmer's practice (Rs 23230/ha)

During Rabi season 2.7 ha area was covered in Aldona and Dhargal villages involving 7 farmers to popularise the ICM in groundnut var.TG37-A. The variety gave avg yield of 21.64q/ha as against the farmers practice (15.60q/ha) which was 38.72 % increase. The FLD results also showed 90-95% germination maintaining optimum plant population as against farmers practice with lower incidence of leaf spot 5-7%. The demonstration gave a net return of Rs 75,915/ha with B:C ratio of 1:3.64 compared to farmers practice Rs 30,050/ with B:C ratio of 1:1.97





**GREEN GRAM** 

The FLD on Popularisation of Green Gram variety S-4 under residual moisture in rice fallows in selected villages of Aldona,Goa velha,Diwar covering 2.6 ha with 15 farmers recorded pod yield of 10.6q/ha(5.8q grain) as against the traditional practice(6.7q/ha). The ICM in green gram gave germination of 90-95 % over farmers practice 65-70%. The FLD was well accepted by farmers due to early maturity, high yield and easy marketability. The Net returns of Rs 24,750/ha in 65 days with B:C ratio of 1:2.67 was very attractive as against the net return of Rs

15900/ha under the traditional practice. The technology was well accepted by all farmers as well as has created awareness with State department.

The Frontline demonstration to popularise Alsando-1 selection under residual moisture in rice fallows resulted in grain yield of 9.35q/ha against the farmer's practice 7.36q/ha with B:C ratio 1:1.98 with net income of Rs16,800/ha& increase income of Rs7762/ha. Better germination percentage with optimum plant population 80-85% as against 60-65% and lower incidence of aphids 8-10% contributed for the yield increase. The FLD covered an area of 1.55ha involving 9 stakeholders in Aldona, Pilar, Goa Velha and Dhargal villages.





An area of 11.75 ha was covered to popularise the rice variety Naveen involving 61 stakeholders in Diwar, Dhulapi, Pilar and Goa Velha villages. The variety yielded 20.09% more(52q/ha) than the farmers practice (43.3q/ha) with reduced pest incidence and response to ICM. The net gain was Rs 45,330/ha with B:C ratio of 1:3.08 compared to Rs24,950/ha in farmers practice.

FLD on SRI with Naveen covered 3.25 ha involving 8 stakeholders in Dhulapi,Diwar,Goa Velha and Pilar villages recorded highest yield of 84.7q/ha as against 52q/ha in recommended practice and 43.3q/ha. Among the yield contributing characters analysed,, the number of productive tillers (38-45) under SRI against 12-14 in best farmers practice, water regulation, ICM contributed to 62% yield increase in SRI. Economic indices resulted in net returns of Rs75,594/ha with B:C ratio of 1:4.7 compared to Rs45,330 in farmers practice.





FLD on Management of root rot in Chilli covered 1 ha involving 10 stakeholders in Pilar village recorded highest yield of 19.5q/ha in FLD as against 11.2q/ha in recommended practice giving 74.11% yield. The incidence of root rot recorded was 1.74% as against the farmers practice 8.42%.

Onion Variety Bhima Kiran recorded yield of 25.05t/ha compared to farmer's variety 18.2t/ha. An area of 0.25 ha was covered under ICM in onion covering 5 stakeholders. The avg bulb wt was 81gm as against 45gm in local variety. The incidence of Purple blotch disease in the demonstrated variety (3-4%) compared to 10-12% in farmers practice. The FLDs gave net income of Rs 1,20,000/ with B:C ratio 1:92 and economic advantage of Rs 55,000/ha





An area of 0.50ha was covered involving 10 stakeholders in Goa velha, Amona, Pillar, Chodan villages to demonstrate the Intercropping of turmeric variety Pratibha which yielded 20.3q/ha This gave additional income of Rs. 3.62 lakh/ha



FLD on Management of Stem & root borer in Cashew covered 5 ha involving 10 stakeholders in Pilar village recorded highest yield of 14.59q/ha in FLD as against 12.09q/ha in recommended practice giving 20.67% yield. The incidence of infestation recorded was 2.63% as against the farmers practice 7.44% with B:C ratio of 1:4.31.

FLD on Vermicomposting established 9 units each of 432sq.mt in selected villages. On an average, 600kgs vermicompost from each unit was obtained after 45-50 days with 60-65 % conversion ratio. The technology was well accepted over traditional compost pits which take 8-9 months for compost maturity. The farmers get Farm Yard manure only once in year i.e January or February due to heavy rainy season from June to September. The economic gain was Rs 5200/ in 2 months with a B:C ratio of 1:3.26. Three units were established at KVK campus in Externally funded projects namely IATM, polyhouse, KVK dairy unit and the production has started.





The FLD on Homestead Farming covered an area of 4000 m<sup>2</sup> involving 3 stakeholders in Aldona, Veling and KVK Campus. The nutrition garden with integrated farming demonstrated yielded net returns of Rs. 4,325/ unit with B:C ratio of 1:2.44.

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# **Training Programmes Conducted**

During the period 91 training programmes were conducted by KVK and 2070 participants comprising of 825 males and 1245 females were imparted skills in different technologies of Crop Production, Horticulture, Plant Protection, Home Science and Agril. Extension.

Some of the popular programmes included Apiculture, vermicomposting for Dairy Cooperative, Brinjal wilt management, Capacity building programme for Agricultural Development, Chilli wilt management, Coconut Based Farming System, Entrepreneurship training in Seed, Planting material production, Grafting techniques and nursery management, Green gram production technology, Groundnut seed treatment and sowing technique, Group dynamics, Improved Cultivation Practices for fruit crop, Improved cultivation practices for Vegetables, Interculture roughing and data collection in SRI FLD, IPM, Jackfruit Processing, Kitchen Gardening, Leadership development, Low cost nutritious recipes, Management of leaf blight in cucumber, Mechanization for Tribal farmers, Mushroom Cultivation, Pest management in groundnut, Pest management in paddy, Production technologies for Pulses & Groundnut, Soil testing and nutrient management, Spawn Production, SRI Nursery raising, Technology for green gram, Training on Data collection of rice, Training on Groundnut cultivation, Value addition in groundnut, Vegetable cultivation in Polyhouse, Vermiculture technology, etc.





During the period KVK has published Two Technical bulletin viz: Vegetative methods of plant propagation in horticultural crops, A guide for identification and management of nutrient deficiencies and cultural practices in plantation crops. one technical folder on cultivation of turmeric, one booklet on Technological interventions : sucess & impact, Vision 2050, Newsletter 2012.



### **Other Extension Activities**

During the period, 562 Other Extension Activities were organized viz; Field days, Exhibitions, Diagnostic vists, Field visits, Farmers visits to KVK, special lectures, etc. covering 55,333 participants (28431 Male and 26902 Female) and 591(440 Male and 151 Female) extension personnel.



# **Special Prog. attended by KVK Staff**

Date	Name	Programme	Venue
9 <sup>th</sup> – 12 <sup>th</sup> July	Mr. Vishram Gaonkar	KVK Annual Review Workshop	KVK Pattanamtitha
30 <sup>th</sup> September	Mr. Vishram Gaonkar	PPV FRA awareness training	ZPD, Zone VIII, Bangalore
23 <sup>rd</sup> -25 <sup>th</sup> October	Mr. Vishram Gaonkar	KVK National Workshop	UAS, Bangalore
28 <sup>th</sup> October	Mr. Vishram Gaonkar	Workshop on "Urban Horticulture"	UAS, Bangalore
25 <sup>th</sup> May	Mrs. Sunetra Talaulikar	Training cum Jackfruit festival	Kadamba Marketing, Sirsi
19 <sup>th</sup> – 31 <sup>st</sup> August	Mr. Vishwajeet Prajapati	Training Programme on "Enchancement of Programming Skill Development"	UAS, Dharwad

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