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Commodity Based Extension System Through Commodity Interest Group Approach

G. Eswarappa[1], E.Yellappa[2] and M.C.Rajeshwari[3]

ABSTRACT

The present study was carried out in eight districts of Karnataka during the year 2012-13. The Community Based Tank Management Project Consultancy Services (CBTMPCS) at University of Agricultural Sciences, Bangalore established 22 Commodity Interest Groups (CIGs) in its operational area. Sincere efforts were made to motivate and encourage farmers in these 22 villages to organize Commodity Interest Groups of their own choice enrolling 20 members in each group with the financial and technical support from CBTMPCS and implemented various activities which include creation of revolving fund of ₹ 50, 000 /- for the use of their members. Establishing integrated crop management (ICM) demonstrations on 22 agricultural/horticultural crops covering 141.90 ha area involving 467 CIG members, procurement of packing and branding materials worth of ₹ 25,000/- to each CIG and developing marketing linkage with the recognized marketing agencies/organizations were the major initiatives. As a result of working of farmers in groups through CIGs and by adopting all the recommended technologies it was possible to increase overall crop yields by 29.11 per cent and water use efficiency (WUE) by 48.98 per cent and thus saving 6950.00 ha. cm water in the demonstrated area of 141.90 ha, besides securing net income of ₹ 250.34 lakhs by 467 farmers (CIG members).From this, it is evident that Commodity Interest Groups can play a vital role in bringing cohesiveness among group of farmers to collectively plan, mobilize resources, carry out the designed activities more systematically to secure increased production and net income to the members through organized marketing which saves time, money and labour.

Key words : Commodity interest groups (CIGs), integrated crop management (ICM), demonstrations, procurement

INTRODUCTION

From the time immemorial, agriculture has been the foundation of civilization of mankind. Agriculture is the main source of food for people and livestock and provides raw material to agro-based industry. Agriculture is the lifeline of the rural India. About 69.0 per cent of our population lives in rural areas and majority of them depend on agriculture for their livelihood. In India, owing to advent of science and technology as a result of sustained agricultural research and its application in the fields through the efforts of extension functionaries, the agriculture sector has witnessed a tremendous growth. Achieving the progress in agricultural production which was mere 52.0 million tonnes in 1950-51 to 255.36 million tonnes in 2012-13 was not an easy task. Several factors operate in this significant contribution for food. Manpower is one among them. It is heartening to state that during the past 50 years in India the rural population has decreased from 82.0 per cent to 69.0 per cent. Among them 66.2 per cent rural males and 81.60 per cent rural females are engaged in agriculture as cultivators or agricultural labourers. In other words, only 52.0 per cent of our population is available to work as labour force in the agriculture sector. This is the time to remember that in the past joint family system was prevailing in rural communities where family members themselves used to carry out most of the farming activities. Now, this is changed as nucleus family system and as such they are forced to depend on hired labourers for farm work which is scarce resource in recent years. But farmers living in nucleus family system now-a-days are facing uphill task of managing production and marketing aspects in agriculture simultaneously. Adding to this, there is a shocking news, which is a fact also, which rocks Indian agriculture is that as per the National Sample Survey (NSS) data about 40.0 per cent of people in rural areas want to leave agriculture as profession if they get better option of occupation. If this becomes the reality what would be the fate of Indian agriculture? Let us not look for the worse. As an option, this situation calls for the farmers living in the same vicinity to come together, plan and work together to achieve the goal of common interest. The farmers Commodity Groups (CIGs) or Commodity Based Associations (CBAs) can play a very vital and significant role to overcome this problem in agriculture to some extent.

Commodity Interest Group is a self-managed voluntary,

[1]Former Programme Coordinator, [2]Former Consultant (Training & Capacity Building), [3]Former Field Technician, CBTMPCS, University of Agricultural Sciences, Gandhi Krishi Vignana Kendra, Bangalore-65, Karnataka.

independent group of farmers with a shared goal and interest. The members of CIG work together to achieve this goal by pooling their resources, gaining better access to other resources and to share in the resulting benefits.

METHODOLOGY

The Community Based Tank Management Project Consultancy Services (CBTMPCS), University of Agricultural Sciences, Bangalore established as many as 22 Commodity Interest Groups (CIGs) in its operational area spread over in eight districts *viz* Chikkaballapura, Kolar, Tumkur, Chitradurga, Davanagere, Shivamogga, Chikmagalore and Hassan during 2012-13. The CBTMPCS staff visited the selected villages three months in advance, convened the general meeting of farmers and explained in detail about the purpose and advantages of organizing Commodity Interest Group in the village. After a thorough discussion and interaction and clarification of doubts by the CBTMPCS staff, the farmers had agreed to organize Commodity Interest Groups in 22 villages. In each CIG only 20 voluntarily interested, co-operative and like minded farmers were enrolled as members. These members inturn form an Executive Committee consisting of a President, Secretary, Treasurer and four EC members empowering to take suitable decisions from time to time and management of CIG. Appropriate Bye-law was formed suiting to the objectives of CIG. All the 22 CIGs were registered under the Karnataka Cooperative Society Act of 1961. All the office bearers and members of CIGs were well-trained about organization, operation, management, marketing intelligence and account maintenance by the experienced project and university staff by organizing two trainings at village level and one training programme at Institutional level. The CIG members were also trained about the production and marketing aspects of 22 agricultural/horticultural crops grown by them. Every CIG was encouraged to establish revolving fund of ₹ 50,000 with the contribution of 50 per cent each from CIG and the CBTMPCS to support their farming and marketing business. In addition, supplied suitable packing and branding materials worth of ₹ 25, 000 with similar 50 per cent cost share. The CBTMPCS organized exposure visits for benefit of the office bearers /members of all the CIGs to visit marketing agencies like Reliance Fresh, Coconut Development Board, KMF Cattle Feed Mixing Unit and Agricultural Produce Marketing Committee (APMCs) located at district and taluk level to develop marketing linkage and to study marketing aspects. The CIG members were encouraged and guided in the selling of horticultural farm products with their branding names using containers in the shandys, APMC yards and recognized marketing places under their CIG banner and also using marketing kiosks supplied by the CBTMPCS wherever possible. These marketing approaches helped CIG members in getting better prices to the farm produce and higher income.

During *kharif*-2012 as many as 467 farmers (members of 22 CIGs) were encouraged to establish integrated crop management (ICM) demonstrations on 22 agricultural/horticultural crops covering 141.90 ha area by providing financial assistance @ ₹ 4000/ha. from the project, besides technical guidance from the project staff periodically.

RESULTS AND DISCUSSION

Formation and promotion of CIGs and crops grown under ICM demonstrations

Information on the places of CIGs organized, number of members enrolled, dates of formation /registration of CIGs, area covered under different crops ,yield obtained and marketing linkage established is presented in Table-1. The data revealed the details about CIGs organized with specific names in 22 villages spread over in eight districts enrolling a total of 440 members @ 20 farmers per CIG, formed CIGs with registration between April and September 2012, organized training programmes for the benefit of CIG members at village level and at institutional (KVKs) level between April-August-2012 for training them about organization and management of CIGs and technical empowerment to its members ,types of crops grown (2 cereals,19 vegetables/fruits/flowers and 1 mulberry) along with area covered under ICM demonstrations. During the bench mark year the yield ranges from 5.09 Q/ha in Kodomillet to 525.75 Q/ha in Banana crop. In the ICM demonstrations the lowest and highest yield recorded were 6.33 Q/ha in Kodomillet to 666.65 Q/ha in Banana crop. The percentage yield increase in different crops in ICM demonstrations over bench mark year ranges from 13.70 percent in tomato crop at Oderhattur village in Honnali taluk of Davangere district to 38.43 percent in chrysanthemum flower crop grown at Avalipalya village in Tumkur taluk.

Table 1: Formation of CIGs and crops grown by members during *kharif* - 2012

Name of Village/ Taluk/ District	Name of the CIG	No. of members enrolled	Date of formation/ Registration of CIG	Date of training at village level / KVKs	Total area covered (ha.)	Crops grown	Yield (Qtl /ha) Bench Mark Year	Yield (Qtl /ha) Demo	Percentage increase over BMY	Remarks / Marketing linkage
Jarabandahalli / Gowribidanur / Chintamani	Sri Janapriya Tarakari Belegaarara Saraku Asaktha Gumpu	20	26.05.2012 / 18.07.2012	26.04.2012 30.05.2012/ 30.08.2012	3.70	Pole beans Tomato Brinjal Cabbage	122.29 410.00 320.19 425.00	154.30 499.78 397.67 510.00	26.10 21.70 24.06	Reliance Fresh, Chikkaballapura
Nagadenhalli / Chintamani / Chintamani	Veeranjineya Tarakari Belegarara Saraku Asaktha Gumpu	20	11.07.2012 / 15.09.2012	08.06.2012 11.07.2012/ 30.08.2012	3.60	Capsicum Pole beans Tomato Knol-khol	210.00 114.00 423.00 165.00	264.00 137.00 519.00 198.00	20.05 25.37 20.59 22.73 20.00	APMC, Chintamani
Angarekanahalli / Chikkaballapura / Chintamani	Angarekanahalli Gladiolus Pushpa Belegarara Saraku Asaktha Gumpu	20	21.06.2012 / 20.07.2012	21.06.2012 11.07.2012/ 30.08.2012	5.00	Gladiolus flower	187740 (Cut flowers)	223810 (Cut flowers)	19.21	K.R.Market / Russel Market, Bangalore
Kadashanahalli / Chintamani / Chintamani	Swamy Vivekananda Reshme Belegarara Saraku Asaktha Gumpu	20	09.07.2012 / 15.09.2012	09.07.2012 11.07.2012/ 30.08.2012	5.00	Mulberry/ Silk worm rearing	269.00	370.00	37.63	Cocoon Market Sidlaghatta / Chintamani in collaboration with Sericulture college
Neeltur / Srinivasapura/ Kolar	Sri Chowdeshwari Tarakari Belegaarara Saraku Asaktha Gumpu	20	20.07.2012 20.07.2012	28.04.2012 25.05.2012/ 30.08.2012	6.00	Tomato	441.11	524.08	18.81	APMC, Vaddahalli / Srinivaspura / Kolar
Banagere / Bangarapete / Kolar	Sri Chowdeshwari Tarakari Belegaarara Saraku Asaktha Gumpu	20	23.07.2012 / 23.07.2012	28.05.2012/ 30.08.2012	5.00	Cabbage Tomato	427.17 427.40	531.48 517.66	24.42 21.12	APMC,V.Kota / Kolar

Avalipalya / Madhugiri/ Tumkur	Sri Mutthurayaswamy Kere Belegaarara Saraku Asaktha Gumpu	20	02.06.2012/ 20.07.2012	02.06.2012 06.07.2012/ 29.08.2012	5.00	Chrysanthemum	94.45	130.75	38.43	Flower Market,Bangalore/ Tumkur
Nelagonadanahalli/ Tipturu / Tumkur	Sri Basaveshwara Tengu Belegaarara Saraku Asaktha Gumpu	20	18.04.2012 / 20.07.2012	18.04.2012 07.07.2012/ 29.08.2012	10.00	Coconut	130 Nuts/ ha/ year	170 Nuts / ha/ year	-	APMC, Tiptur in collaboration with Coconut Board
Gopalanahalli / CN Halli / Tumkur	Sri Kaala bairaveshwara Haraka Belegaarara Saraku Asaktha Gumpu	20	26.05.2012 / 20.07.2012	29.05.2012 19.06.2012/ 29.08.2012	10.00	Kodo millet (Haraka)	5.09	6.33	24.36	Seed Production in colloboration with AICRIP on Minor Millets,UAS,Bangalore
Sanikere / Challakere / Chitradurga	Sri Maruthi Aanjaneya Eerulli Belegaarara Saraku Asaktha Gumpu	20	03.05.2012 / 26.07.2012	03.05.2012 20.06.2012/ 29.08.2012	5.60	Onion	147.90	197.72	33.68	APMC ,Chitradurga / APMC Yeshwanthpur, Bangalore
Kalkere / Holalkere / Chitradurga	Sri Basaveshwara Tarakari Belegaarara Saraku Asaktha Gumpu	20	31.05.2012 / 11.07.2012	31.05.2012 26.06.2012/ 28.08.2012	5.00	Beans Bhendi Brinjal Carrot Chilli Ridge gourd	61.56 110.50 313.50 176.22 256.00 202.00	72.13 135.50 397.50 219.11 305.00 272.00	17.16 22.62 26.79 24.34 19.14 34.65	APMC, Chitradurga / APMC, Davangere / APMC,Shimoga
Guthanahalli / Sagara / Shivamoga	Sri Durga Tarakari Belegaarara Saraku Asaktha Gumpu	20	25.06.2012 / 10.07.2012	20.04.2012 09.07.2012/ 28.08.2012	6.00	Beans Brinjal Chilli Bhendi	90.08 256.00 225.39 95.83	114.09 330.00 304.50 123.83	26.66 28.91 35.10 29.47	APMC , Sagara / APMC, Shimoga
Huluginakatte/ Shikaripura / Shivamoga	Sri Basaveshwara Mekkejola Belegaarara Saraku Asaktha Gumpu	20	20.06.2012/ 10.07.2012	22.05.2012 30.06.2012/ 28.08.2012	5.00	Maize	55.54	71.04	27.90	KMF,Rajanakunte, Bangalore
Kodihalli / Soraba / Shivamoga	Sri Maruthi Tarakari Belegaarara Saraku	20	20.05.2012 / 10.07.2012	22.05.2012 28.06.2012/	5.00	Beans Brinjal Cucumber	72.00 250.20 305.1	98.33 335.67	36.11 34.10 31.14 23.60	APMC , Soraba / APMC , Shimoga

Uppalli / Soraba / Shivamoga	Sri Basaveshwara Tarakari Belegaarara Saraku Asaktha Gumpu	20	20.05.2012 / 10.07.2012	30.05.2012 28.06.2012/ 28.08.2012	10.00	Beans Brinjal Chilli H.Avare	85.02 260.07 225.07 65.50	106.60 345.19 300.29 83.75	24.70 32.60 33.00 27.60	APMC , Soraba / APMC , Shimoga
Yadavala / Shimoga / Shimoga	Sri Nandi Tarakari Belegaarara Saraku Asaktha Gumpu	20	22.06.2012 / 10.07.2012	21.04.2012 22.06.2012/ 28.08.2012	10.00	Bhendi Brinjal Chilli Ridge gourd Veg. Cowpea	113.00 309.50 276.67 235.00 83.00	140.00 388.75 350.00 298.80 102.00	23.78 25.61 26.51 26.80 22.89	APMC,Shimoga/ Honnali / HOPCOMS, Shimoga
Mugudthi / Hosanagara /Shimoga	Sri Mahaganapathi Baalebelegaarara Belegaarara Saraku Asaktha Gumpu	20	29.06.2012 / 10.07.2012	07.06.2012 29.06.2012/ 28.08.2012	10.00	Banana	525.75	666.65	26.80	APMC, Shimoga/ HOPCOMS , Shimoga
Jaladhihalli / Tarikere / Chikkamagalur	Sri Umashankara Menasinakai Belegaarara Saraku Asaktha Gumpu	20	23.06.2012 / 16.07.2012	20.04.2012 20.06.2012/ 29.08.2012	5.00	Chilli	177.50	229.75	29.37	APMC ,Tarikere / APMC , Shimoga
Ganganahalli/ Kadur/ Chikkamagalur	Sri Kalleshwara Yelaneeru Belegaarara Asaktha Gumpu	20	21.06.2012/ 10.07.2012	21.05.2012 21.06.2012/ 29.08.2012	10.00	Coconut	125 Nuts/ ha/ year	160 Nuts / ha/ year	-	APMC,Tiptur in colloboration with Coconut Board
Kyarkatte / Harapanahalli / Davanagere	Sri Basaveshwara Mekkejola Belegaarara Saraku Asaktha Gumpu	20	03.05.2012 / 05.07.2012	30.05.2012 27.06.2012/ 28.08.2012	6.00	Maize	50.17	64.67	28.90	KMF , Rajanakunte, Bangalore / APMC, Chitradurga / APMC, Davangere
Oderattur / Honnali / Davanagere	Sri Chenna basaveshwara Aanjaneya Tarakari Belegaarara Saraku Asaktha Gumpu	20	30.05.2012 / 30.08.2012	30.05.2012 21.06.2012/ 28.08.2012	6.00	Bhendi Beans Chilli Tomato	95.00 85.90 170.00 365.00	125.00 110.40 196.00 415.00	31.50 28.50 15.29 13.70	APMC, Shimoga/ Honnali / HOPCOMS, Davangere / HOPCOMS, Shimoga
Kallengere / Arasikere / Hassan	Sri Gangamma devi Kere Belegaarara Saraku Asaktha Gumpu	20	20.06.2012 / 17.07.2012	09.05.2012 15.06.2012/ 29.08.2012	5.00	Tomato	390.00	497.87	27.65	APMC, Yeshwanthpur / APMC, Arsikere / Reliance

Yield performance of crops grown under ICM demonstrations established by CIGs during *Kharif*-2012

Information on yield performance of crops grown under ICM demonstrations established by CIGs during Kharif-2012 which covers type of crops grown, number of locations, number of farmers involved, area covered under each crop, yield data, water use efficiency and net income secured is presented in the following Table 2.

Table 2: Yield performance of crops grown under Integrated Crop Management Demonstrations established by CIGs during *kharif*-2012

Crop	No. of locations	No of farmers	Area (ha)	Yield / ha (qtls)		Percent increase over check	WUE(Kg/ha.cm)			Net income (₹)
				Demo plot	Check plot		Demo plot	Check plot	Per cent increase over check	
Food crops										
Maize	2	30	11.00	67.85	52.86	28.40	79.83	53.93	48.01	676695
Kodomillet	1	20	10.00	6.33	5.09	24.36	15.83	10.18	55.45	213200
Total/Average		**50**	**21.00**			**26.38**				**8,89,895**
Horticulture crops										
Tomato	6	59	16.60	492.56	407.15	20.96	820.94	581.64	41.14	5468424
Chilli	7	75	20.75	285.03	225.81	26.00	380.03	265.65	43.06	5084284
Brinjal	6	34	8.45	365.80	284.91	28.68	522.57	356.14	46.73	1842587
Bhendi	4	21	4.10	131.08	103.58	26.84	218.47	147.98	47.64	336094
Beans	5	31	5.60	100.31	78.91	26.63	441.36	263.04	67.79	348936
Cabbage	2	7	3.70	513.83	426.20	20.58	1468.08	947.11	55.01	673081
Cucumber	1	5	0.80	400.60	305.40	31.17	801.20	710.33	12.79	233984
Pole beans	2	5	1.80	145.74	118.02	23.38	582.96	393.40	48.18	333329
Capsicum	1	1	0.30	263.50	210.00	25.48	376.43	262.50	43.40	82215
Knol-khol	1	1	0.20	198.00	165.00	20.00	565.71	412.50	37.14	19080
Carrot	1	9	2.30	219.11	176.22	24.34	438.22	293.70	49.21	393556
Ridge gourd	2	12	3.90	285.40	218.75	30.77	570.80	364.58	56.56	406380
Veg. cowpea	1	3	0.60	102.33	83.33	22.80	409.33	277.78	47.36	41480
Onion	1	25	5.60	197.72	147.90	33.68	395.44	246.50	60.42	1034432
Hebbal avare	1	6	1.20	83.75	65.65	27.57	209.38	131.30	59.46	45150
Total/Average		**294**	**75.90**			**25.93**				**1,63,43,011**
Flower crops										
Gladiolous	1	25	5.00	223810 (No. of flowers)	187740 (No. of flowers)	19.21	223.81	156.45	43.06	2127150
Chrysanthemum		20	5.00	130.75	94.45	38.43	186.78	118.06	58.21	2721875
Total /Average			**10.00**			**28.82**				
Banana	1	20	10.00	666.65	525.75	26.80	333.33	228.59	45.82	3966550
Coconut	2	40	20.00	20750 Nuts/ha/year	16000 Nuts/ha/year	29.69	2745 Nuts	1624 Nuts	69.00	795000
Commercial crops										
Mulberry	1	18	5.00	370 (Cocoon)	269 (Cocoon)	37.63	308.33	206.92	49.01	318000
Grand total		**467**	**141.90**			**29.11**			**48.98**	**2,50,34,331**

The data from Table 2 revealed that as many as 22 crops were grown under ICM demonstrations established by CIGs covering 141.90 ha area involving 467 farmers. Due to adoption of improved production technologies the average yield increase was found at 29.11 per cent and water use efficiency at 48.98 per cent and thus saving 6950.00 ha. cm water in the demonstrated area. Further, it was found that from this 141.90 ha demonstrated area a net income of ₹ 242.39 lakhs was secured by 467 farmers due to better marketing linkage with the recognized marketing agencies. This return was from one season (*Kharif*-2012) only. In the light of this achievement, it can be inferred that if departments/organizations working for the cause of development of agriculture closely associate and guide the CIGs properly at least for a period of 6 to 8 seasons continuously it is definitely possible to bring

about sustainability in the functioning and management of CIGs to enable to provide good service to their members to improve their economy through CIGs.

CONCLUSION

The Community Based Tank Management Project Consultancy Services (CBTMPCS), University of Agricultural Sciences, Bangalore established 22 Commodity Interest Groups (CIGs) in its operational area spread over in eight districts during the year 2012-13. The project staff put forth sincere efforts in motivating and encouraging farmers in these 22 villages to come together to organize CIGs of their own choice enrolling 20 members in each group with the financial and technical support from CBTMPCS, planned and implemented various activities which include creation of revolving fund of ₹ 50, 000 for the use of their members at critical times, establishing integrated crop management (ICM) demonstrations on 22 agricultural /horticultural crops covering 141.90 ha area involving 467 CIG members, procurement of packing and branding materials worth of ₹ 25,000 to each CIG, developing marketing linkage with the recognized marketing agencies/organizations. As a result of working of farmers in groups through CIGs and by adopting all the recommended technologies it was possible to increase overall crop yields by 29.11 per cent and water use efficiency (WUE) by 48.98 per cent and thus saving 6950.00 ha. cm water in the demonstrated area of 141.90 ha, besides securing net income of ₹ 250.34 lakhs by 467 farmers (CIG members). Further, it is evident that Commodity Interest Groups can play a vital role in bringing cohesiveness among group of farmers to collectively plan, mobilize resources, carry out the designed activities more systematically to secure increased production and net income to the members through organized marketing which saves time, money and labour.

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