

Cotton Contract Farming in Vidarbha

Dr. Amal Kumar Basu's journey in cotton which began in 1965, continues even today. As Director, Central Institute for Cotton Research Nagpur, he

created a Biotechnology Section and organised the first FAO conference on Hybrid Cotton in Nagpur. He was part of the Govt. of India delegation to visit St. Louis, USA to negotiate with Monsanto in 1992, which paved the way for launching of Bt. cotton in India. As Advisor to Cotton Corporation of India, Mumbai, he was instrumental in CCI's funding of key research projects

in Agriculture Universities in the country. Under his leadership, the first private public partnership for contract farming in cotton began in Maharashtra

with the involvement of CCI, CITI CDRA, Bayer Crop Science and Govt. of Maharashtra. He was involved in all the four Mini Missions of Technology Mission

Imost 60 million people are engaged in the cultivation, trade and processing (ginning, spinning and weaving) of cotton in India. The state of Maharashtra occupies one third ie. 4 million hectare out of 12 million hectare in India. Although the Vidarbha region cultivates more than 50% cotton area of Maharashtra, it is confronted with the problem of very low productivity. To be precise, it is less than 2 bales / ha as against more than 3 bales / ha in India which is also on the lower side.



Dr. A K Basu Ex Director, CICR, Nagpur, Ex Advisor CCI, Mumbai and Ex. Advisor Bayor Crop Science

on Cotton while in CCI. He later joined Bayer Crop Science and spear-headed Public Private Partnership programmes in transfer of technologies for the benefit of

> cotton growers. In 2010, he joined John Deere in Pune to promote Machine Picking of Cotton.

> Dr. Basu has more than 200 research papers, in Indian and foreign journals, and chapters in the book, Success Story of Hybrid Cotton along with Dr. R. S. Paroda in both Hindi and English, to his

> > credit. He has received the Hexamar Award of ISCI for excellence in cotton breeding, Scroll of Honour from SIMA for leadership in Cotton Research

& Development, Lifetime Achievement Award from Haryana Cotton Research and Development Association and AICCIP Silver Jubilee Medal.

Factors influencing low productivity

The factors which cause low productivity of cotton in India and particularly Vidarbha are as follows:

- 1. Cotton is largely rainfed with uneven distribution of rainfall.
- 2. Bt cotton which occupies most of the cotton

area in India and Vidarbha requires adequate availability of inputs like water, fertilizers and pesticides to harness its potential of high yield.

- 3. Cotton is also grown in shallow (less than 40 cm in depth) in Vidarbha which is not conducive for high yield.
- 4. Transfer of technology to achieve high yield is not adequate.
- 5. Limited access to institutional finance for the farmers.

Advantages of Contract Farming

Taking all the above factors into consideration, the advantages of contract farming in Vidarbha can benefit the farmers in the following ways:

*Contract farming improves productivity and quality of cotton and reduces the cost of production by efficient use of inputs and provides the farmers with the right seeds, fertilizers and pesticides and imparts to them the latest methods of cotton cultivation.

*It makes farmers aware of post harvest practices in the farm, during transportation of the produce to home/ ginning factory to reduce trash and contamination.

*It facilitates tie ups of the farmers with trade, ginning factory and textile mills for procurement of the produce.

How to Implement a Contract Farming Project

- 1. A Memorandum of Understanding (MOU) is signed by the producer (farmer), buyer (trader,/ ginning factory owner/ mill) and the Facilitator (Bayer Crop Science, Cotton Corporation of India).
- 2. Area and farmers are identified and a Farmers Association is formed. This Association will sign the MOU on the behalf of the farmers.
- 3. Project farmers are helped by the facilitators in procuring inputs.
- 4. Training on modern methods of cotton cultivation are provided by the Project Coordinator and Scouts appointed for the purpose.

- 5. Booklets on Package of Practices on cotton in Marathi are printed and supplied to project farmers.
- 6. The farmers follow guidance given by the Project Coordinator on the hybrids to be grown and POP to be done to maximise the yield.
- 7. The farmers agree to sell the produce to the buyer and the buyer, in turn, is committed to purchase it at the prevalent market rate.

Activities Under Contract Farming

- > To ensure that the fertility status of the soil, soil samples are tested by RCF / IFFCO.
- > Seeds and fertilisers are purchased by the farmers from identified companies / dealers.
- > Bayer Crop Science which has all the pesticides for cotton pest management supplies them through their distributor/ dealer.
- > As stated before, farmers cultivate cotton in accordance to the guidance of the Project Coordinator.
- > Procurement is done after consultation between the buyer and the seller.

Collaborators of the Contract Farming Project

The cotton contract farming projects in Vidarbha had collaborated with Bayer Crop Science, Mumbai, Cotton Corporation of India, Mumbai, Gokak Mills Karnataka, Veerchand Narsee G & P Factory, Malkapur (Buldana) during 2003-04 and 2004-05, while CITI CDRA and Maharashtra State Department joined during 2006-07.

Contract Farming Project Details

Year	District	No. of Villages	Area (ha)	No. of Farmers	Hybrids included in the Project
2003-04	Buldana	4	306	239	Bunny
2004-05	Wardha Beed	35, 2	2271, 372	2198, 95	Ankur 651 Ankur6 09 Bt Paras, Goldmine, RCH2 Bt
2006-07	Wardha	31	500	531	Ankur 651 Bt, Ankur 6 09 Bt, Bunny Bt

Year		Av. Yield (q/ha)	Av. Cost of Production (Rs/ha)	Gross Income (Rs)	Increase in Profitability (%)
2003-04	Project Area	11.09	9635	25,300	27
	Non Project Area	8.23	10,006	18,400	
2004-05	Project Area	12.21	7604	28,098	13
	Non Project Area	10.64	9289	24,483	
2006-07	Project Area	13.57	11600	27,150	24
	Non Project Area	10.35	12838	20,700	

Results

Constraints

Due to their small holdings, a larger number of farmers need to be roped in for contract farming of cotton, in order to cater to the need of user mills. Also there is need to spread more awareness, if the benefits of contract farming are to reach all stake holders and lastly, Government support is crucial to promote the practice of contract farming.

The average cotton lint yield and net income/ ha in FLDs-Production technology under rainfed conditions at Buldhana, Maharashtra during 2008-2009.

- > Above mentioned methods and practices will promote sustainability of cotton cultivation
- > Will benefit all stake holders

The Way Forward

With more and more stake holders showing interest in contract farming, it augurs well for the spread of the programme. More R& D efforts are needed from scientists to improve technologies for resource poor cotton farmers of Vidarbha. It is also essential to amend the APMC Act where it does not exist.

Dist/Taluka	No. of demons.	Area (ha)	Demo. Yield (kg lint/ha)	Local yield (kg lint/ha)	Increase (%)	Demo/Local B:C ratio
Jalamb	1000	400	612	474	29.1	1:2.1/1:1.8
Kherda			606	498	21.7	1:2.1/1:2.0
Takli Dharo			547	439	24.6	1:2.0/1:2.2
Takli Viro			604	510	18.4	1:2.2/1:1.9
Janori			573	490	16.9	1:2.1/1:2.2
Taklihat			587	558	5.2	1:2.2/1:2.1
Average			588	494	19.3	1:2.1/1:2.0

Socio Economic Benefits from Private-Public Partnership Programme

- > Involvement of poor marginal farmers in cotton value chain
- > Linkage of marginal farmers with all stake holders in cotton production
- > Increase in farmers' awareness of the latest methods of cotton cultivation
- > Use of new varieties/ hybrids and new pesticides
- > Awareness of safe use and handling of pesticides
- > Cost of cultivation of cotton reduced due to need based and judicious application of inputs

Source of Information

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- 4. A. K. Basu and A. Tanweer (2006) Integrated Cultivation through Contract Farming, In India : Cotton - ICM Edition Vol 2, pp 23-26(BCS)

(The views expressed in this column are of the author and not that of Cotton Association of India)

CAI and CCA Sign Historic MOU



hen two giants of the cotton world come together, it results in a historic milestone. This is exactly what happened on June 9, 2017, at the China International Conference in Chongqing, when the Cotton Association of India (CAI) and China Cotton Association (CCA) signed a MOU.

The MOU was signed by CAI President Mr. Nayan Mirani and Ms. Gao Fang, legal representative of CCA, in the presence of Mr. Dai Gongxing of CCA and the Indian delegates who accompanied Mr. Mirani.

The Indian delegates present at the historic event included CAI board members, Mr. Vinay Kotak, Mr. Arun Sekhsaria, Mr. Raja Gokulgandhi, Mr. Rishit Dholakia and Mr. Mohit Shah, former president of the International Cotton Association (ICA) UK.

Signing this MOU has significant trade implications for both India and China and the delegates present at the event were unanimous in their reactions.

According to Mr. Nayan Mirani, President CAI, "India and China are the largest cotton economies, and signing this MOU will go a long way in resolving the issues faced by traders in both the countries."



Mr. Vinay Kotak adds, "This was a historical moment for building future of the cotton fraternity in India and China."

Mr. Raja Gokulgandhi says, "This is a very big historic step because India and China are the biggest producers and consumers of cotton. For many years China has been the biggest importer of Indian cotton and this MOU will definitely promote Indian cotton in China in a big way. This will also pave the way for better trade practices and cooperation between the two countries."

Mr. Mohit Shah feels that, "Signing this MOU was long over- due. It's an historic development and will foster better understanding between CAI and CCA."

Mr. Rishit Dholakia concludes by saying, "We got a very positive response from CCA and this MOU is going to be very good for all future Indian cotton trade with China."



COTTON EXCHANGE MARCHES AHEAD

Madhoo Pavaskar, Rama Pavaskar

Chapter 6 March To Freedom - II

(Contd. from Issue No. 6)

Controls Again

As his letter then did not cut any ice with the adamant RBI, Mr. Mirani decided to try to take the bull by the horns. At the onset of the next cotton season, on September 2, 1992 he led a delegation to meet with the RBI officials of the Credit Planning Cell and apprised them personally of the supply and demand situation in cotton for the 1991-92 season

and the huge carry-over stock of 35 lakh bales at the end of August 1992, and pointed out that unless credit restrictions were removed, marketing of the 1992-93 season's bumper crop would be very difficult and eventually farmers would suffer the most as a result. But the RBI was still in no mood to listen. It preferred to shut its eyes as well. Except for reducing the minimum interest rate to 18 per cent, the new credit policy announced on October 8, 1992 did not provide any relief to the cotton trade.

RBI Relents

The Cotton Exchange was disappointed, but not disheartened. With renewed vigour Mr. Mirani shot

out yet another letter to the Governor of Reserve Bank of India explaining the supply-demand situation in cotton. Stressing that cotton prices were on a continuous decline since June 1992 and would be under pressure once arrivals gather momentum, Mr. Mirani expressed apprehension that the returns to farmers would be affected adversely, if the arrivals were not absorbed promptly. Without waiting for the RBI's response, Mr. Mirani followed up his letter by sending its copy to the Union Ministry of Textiles. Mr. Ajay Prasad, Joint Secretary in the Ministry of Textiles, took up this issue with his counterpart, Mr. Dinesh Chandra in the Ministry of Finance, and informed the latter that in the wake of economic liberalization, the Ministry of Textiles would welcome the removal of selective credit control on cotton and kapas, as it had outlived its utility. The Cotton Advisory Board too endorsed Mr. Mirani's viewpoint. At the instance of Mr. Mirani, the Federation of Indian Chambers of Commerce and Industry (FICCI) also took up the matter earnestly with the RBI Governor and the Finance Secretary.



Mr. Mirani's unrelenting efforts eventually yielded a small relief, and on December 10, 1992 the minimum margins on cotton and kapas for the trade were reduced by 15 percentage points. Mr. Mirani was, however, far from happy. In December 1992 cotton prices were actually 25 to 30 per cent lower than the corresponding prices of the previous year. Mr. Mirani therefore saw "no valid justification

to retain the selective credit control measures on advances against cotton and kapas with 60 per cent margin to discipline the cotton prices", and urged the RBI once again to withdraw immediately the credit controls. In response, on January 19, 1993 the minimum margins were lowered by yet another 15 percentage points, setting them thereby at 45 per cent against stocks and 30 per cent against warehouse receipts.

Struggle Renewed

The Cotton Exchange was far from pleased by the crumbs thrown at it by the RBI, since it was convinced that there was no real justification for applying selective credit controls

on advances against cotton and kapas in view of the comfortable supply situation in cotton that had emerged since the mid-1980s. Smelling victory in sight, with the RBI relenting but gradually, it renewed its struggle against the outdated selective credit controls with even greater vigour.

In a letter dated February 19, 1993 addressed to Dr. C. Rangarajan, the new Governor of the Reserve Bank and an eminent economist, Mr. Mirani depicted a vivid picture of the 1992-93 cotton season, showing a large opening stock of 35 lakh bales and a comfortable end of the season carry-over of 33 lakh bales-equivalent to approximately 3 1/2 months' mill consumption of cotton, despite exports of 15 lakh bales for which quotas were already released. If the exports were to fall short of expectations, the carry-over at the end of the season would be larger still by the size of such shortfall.

Mr. Mirani pointed out to the RBI Governor that following the favourable supply, cotton prices had

declined through the calendar year 1992, and at the onset of 1993 were lower by 25 to 30 per cent than the prices a year before. In fact, prices for some of the varieties were just above the minimum support levels prescribed by the government. While the government had released export quotas to stem the slump in cotton prices, it was strange that the RBI was resorting to selective credit controls to depress prices. Since any further fall in prices would not only affect the interests of cotton farmers, but also reduce the cotton production in the future to the detriment of both the textile industry and textile exports, Mr. Mirani urged the RBI Governor for the umpteenth time to withdraw immediately the selective credit controls on cotton.

The letter to the RBI Governor was followed by a similar letter to Mr. Manmohan Singh, the then Union Minister of Finance. While presenting the Union Budget for 1993-94, the Finance Minister had explicitly spelt out the government policy of releasing a large volume of resources of the banks for commercial lending by reducing the statutory liquidity ratio (SLR). Mr. Mirani brought to the notice of the Finance Minister that the policy of selective credit control was in conflict with the newly declared government policy, and requested him to advise the RBI to remove forthwith the selective credit controls on cotton and kapas.

Another Success

As usual, the government as well as the RBI were slow to react. On April 8, 1993, the RBI offered yet another small sop to the trade by raising the credit ceiling on advances against cotton and kapas by 15 percentage points, setting it to 100 per cent of the peak level credit during the three years ending 1991-92. On June 24, 1993 the level of credit ceiling was further raised to 115 per cent. The minimum interest rate was also brought down to 16 per cent. Clearly, without rhyme or reason, the RBI preferred to tread a cautious path. After much persuasion, on October 11, 1993 the selective credit controls on cotton and kapas were removed altogether, which marked the third success for the trade in its struggle against the RBI since 1965.

(To be continued)

C.r.			Day 19.	06.2017		Period 01.06.2017 to 19.06.2017			
No.	State	Actual (mm)	Normal (mm)	% Dep.	Cat.	Actual (mm)	Normal (mm)	% Dep.	Cat.
1	Punjab	0.0	2.3	-98%	LD	32.8	19.2	71%	LE
2	Haryana	2.4	1.9	28%	Е	42.3	20.1	111%	LE
3	West Rajasthan	0.0	1.0	-100%	NR	17.4	12.6	38%	Е
	East Rajasthan	0.3	1.9	-83%	LD	21.6	23.6	-8%	Ν
4	Gujarat	0.0	3.6	-99%	LD	33.3	39.2	-15%	Ν
	Saurashtra & Kutch	0.0	3.7	-99%	LD	26.7	29.9	-11%	Ν
5	Maharashtra	1.7	8.8	-81%	LD	131.6	98.9	33%	Е
	Madhya Maharashtra	1.6	5.2	-70%	LD	108.8	76.3	43%	Е
	Marathwada	1.9	6.4	-71%	LD	153.9	79.5	94%	LE
	Vidarbha	0.4	7.6	-95%	LD	83.7	71.6	17%	Ν
6	West Madhya Pradesh	1.0	4.1	-75%	LD	61.5	42.4	45%	Е
	East Madhya Pradesh	3.3	5.7	-42%	D	28.5	47.6	-40%	D
7	Telangana	24.1	5.0	381%	LE	139.4	70.5	98%	LE
8	Coastal Andhra Pradesh	12.1	2.7	346%	LE	94.3	59.1	60%	LE
	Rayalseema	7.2	1.4	413%	LE	72.2	47.1	53%	Е
9	Coastal Karnataka	15.6	31.4	-50%	D	508.1	471.9	8%	Ν
	N.I. Karnataka	9.0	3.0	199%	LE	107.7	62.7	72%	LE
	S.I. Karnataka	1.7	4.3	-60%	LD	68.2	81.0	-16%	Ν
10	Tamil Nadu & Pondicherry	0.1	1.1	-90%	LD	26.9	32.2	-17%	Ν
11	Orissa	6.1	7.6	-19%	Ν	85.9	109.3	-21%	D

Rainfall Distribution (01.06.2017 to 19.06.2017)

L. Excess, Excess, Normal, Deficient, L. Deficient

Source : India Meteorological Department, Hydromet Division, New Delhi

Growth In Capacity Of Cotton / Man- Made Fibre Textile Mills (Non SSI)

		NO. OF MILLS		INSTALLED CAPACITY				
YEAR	SPINNING	COMPOSITE	TOTAL	SPINDLES (Mn.)	ROTORS (000)	LOOMS (000)		
31-03-2005	1566	223	1789	34.24	385	86		
31-03-2006	1570	210	1780	34.14	395	73		
31-03-2007	1608	200	1808	35.61	448	69		
31-03-2008	1597	176	1773	35.01	461	56		
31-03-2009	1653	177	1830	37.03	485	57		
31-03-2010	1673	180	1853	37.68	494	57		
31-03-2011	1757	183	1940	42.69	518	52		
31.03.2012	1761	196	1957	43.31	523	52		
31.03.2013	1771	198	1969	44.17	546	52		
31.03.2014	1757	197	1954	44.47	553	51		
31.03.2015	1776	200	1976	45.08	565	52		
31.03.2016	1779	201	1980	46.00	581	53		
31.03.2017	1803	205	2008	47.12	587	53		
			2015-16 (P)					
April	1776	200	1976	45.09	565	52		
May	1776	200	1976	45.09	565	52		
June	1776	200	1976	45.10	565	52		
July	1776	200	1976	45.24	565	52		
August	1776	200	1976	45.08	565	52		
September	1776	201	1977	45.54	511	52		
October	1778	201	1979	45.57	45.57 515			
November	1778	201	1979	44.65	573	52		
December	1778	201	1979	44.69	5.75	52		
January	1778	201	1979*	45.82	579	53		
February	1779	201	1980	46.02	581	53		
March	1779	201	1980	46.00	581	53		
			2016-17 (P)					
April	1781	201	1982	46.14	578	53		
May	1784	201	1985	46.18	579	53		
June	1787	201	1988	46.42	583	53		
July	1792	204	1996	46.85	583	53		
August	1797	204	2001	46.73	586	53		
September	1798	204	2002	46.94	586	53		
October	1800	204	2004	46.97	586	53		
November	1803	204	2007	47.04	586	53		
December	1803	204	2007	47.07	587	53		
January	1803	205	2008	47.12	587	53		
February	1803	205	2008	47.12	587	53		
March	1803	205	2008	47.12	587	53		
			2017-18 (P)					
April	1803	205	2008	47.12	587	53		

P - Provisional

Source : Office of the Textile Commissioner

	UPCOUNTRY SPOT RATES (Rs./Qtl)											
	Standard Descriptions with Basic Grade & Staple in Millimetres based on Upper Half Mean Length [By law 66 (A) (a) (4)]							pot Rate	(Upcour JUNE	ntry) 201 E 2017	6-17 Cro	р
Sr. No.	Growth	Grade Standard	Grade	Staple	Micronaire	Strength /GPT	12th	13th	14th	15th	16th	17th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0-7.0	15	10095 (35900)	10095 (35900)	10039 (35700)	10039 (35700)	10039 (35700)	10067 (35800)
2	P/H/R	ICS-201	Fine	Below 22mm	5.0-7.0	15	10348 (36800)	10348 (36800)	10292 (36600)	10292 (36600)	10292 (36600)	10320 (36700)
3	GUJ	ICS-102	Fine	22mm	4.0-6.0	20	8183 (29100)	8183 (29100)	8239 (29300)	8239 (29300)	8239 (29300)	8267 (29400)
4	KAR	ICS-103	Fine	23mm	4.0-5.5	21	9420 (33500)	9420 (33500)	9420 (33500)	9420 (33500)	9420 (33500)	9420 (33500)
5	M/M	ICS-104	Fine	24mm	4.0-5.0	23	10517 (37400)	10517 (37400)	10517 (37400)	10517 (37400)	10517 (37400)	10517 (37400)
6	P/H/R	ICS-202	Fine	26mm	3.5-4.9	26	12232 (43500)	12204 (43400)	12148 (43200)	12092 (43000)	12035 (42800)	12063 (42900)
7	M/M/A	ICS-105	Fine	26mm	3.0-3.4	25	9505 (33800)	9505 (33800)	9505 (33800)	9505 (33800)	9505 (33800)	9533 (33900)
8	M/M/A	ICS-105	Fine	26mm	3.5-4.9	25	10151 (36100)	10123 (36000)	10123 (36000)	10123 (36000)	10123 (36000)	10151 (36100)
9	P/H/R	ICS-105	Fine	27mm	3.5.4.9	26	12401 (44100)	12373 (44000)	12317 (43800)	12260 (43600)	12204 (43400)	12232 (43500)
10	M/M/A	ICS-105	Fine	27mm	3.0-3.4	26	10236 (36400)	10236 (36400)	10236 (36400)	10236 (36400)	10236 (36400)	10264 (36500)
11	M/M/A	ICS-105	Fine	27mm	3.5-4.9	26	10798 (38400)	10770 (38300)	10770 (38300)	10770 (38300)	10770 (38300)	10798 (38400)
12	P/H/R	ICS-105	Fine	28mm	3.5-4.9	27	12457 (44300)	12429 (44200)	12373 (44000)	12317 (43800)	12260 (43600)	12288 (43700)
13	M/M/A	ICS-105	Fine	28mm	3.5-4.9	27	11501 (40900)	11445 (40700)	11445 (40700)	11445 (40700)	11445 (40700)	11473 (40800)
14	GUJ	ICS-105	Fine	28mm	3.5-4.9	27	11670 (41500)	11642 (41400)	11642 (41400)	11642 (41400)	11642 (41400)	11670 (41500)
15	M/M/A/K	ICS-105	Fine	29mm	3.5-4.9	28	11895 (42300)	11838 (42100)	11838 (42100)	11838 (42100)	11838 (42100)	11867 (42200)
16	GUJ	ICS-105	Fine	29mm	3.5-4.9	28	12007 (42700)	11979 (42600)	11979 (42600)	11979 (42600)	11979 (42600)	12007 (42700)
17	M/M/A/K	ICS-105	Fine	30mm	3.5-4.9	29	12204 (43400)	12148 (43200)	12148 (43200)	12148 (43200)	12148 (43200)	12176 (43300)
18	M/M/A/K/T/O	ICS-105	Fine	31mm	3.5-4.9	30	12457 (44300)	12457 (44300)	12485 (44400)	12485 (44400)	12485 (44400)	12513 (44500)
19	A/K/T/O	ICS-106	Fine	32mm	3.5-4.9	31	12907 (45900)	12907 (45900)	12907 (45900)	12907 (45900)	12907 (45900)	12907 (45900)
20	M(P)/K/T	ICS-107	Fine	34mm	3.0-3.8	33	15747 (56000)	15747 (56000)	15747 (56000)	15747 (56000)	15747 (56000)	15747 (56000)

(Note: Figures in bracket indicate prices in Rs./Candy)