



Cotton

of India

COTTON STATISTICS & NEWS Association Edited & Published by Amar Singh

2022-23 • No. 50 • 14th March, 2023 Published every Tuesday

Cotton Exchange Building, 2nd Floor, Cotton Green, Mumbai - 400 033 Telephone: 8657442944/45/46/47/48 Email: cai@caionline.in www.caionline.in

How To Improve the Primary Link of Indian Cotton Value Chain

Dr. C.D. Mayee is a renowned cotton scientist and is currently serving as the President of the South

Asia Biotechnology Centre (SABC), New Delhi and Indian Society for Cotton Improvement, Mumbai.

Born in farming family of Maharashtra, Dr. Mayee obtained his agricultural degrees from Maharashtra and PhD from IARI in Plant Pathology. He began his career in plant pathology research at IARI and worked in various capacities at Central Rice Research Institute, Cuttack; Punjab Agricultural University, Ludhiana; the Ford Foundation, Delhi and Maharashtra Agricultural University (MAU)

Parbhani for nearly 30 years.

Parbhani; Director-Central Institute of Cotton Research

(ICAR-CICR) Nagpur and Agriculture Commissioner, Govt. of India, New Delhi before retiring as the Chairman, Agricultural Scientists Recruitment Board (ASRB), Ministry of Agriculture & Farmers' Welfare of the Government of India.

Cotton rules the textile world despite the serious inroads by synthetic fibres. The economy of nearly 82 countries is influenced by cotton and India is no exception. Cotton crop is very important commercially in India and is always referred as lifeline of the country. It occupies almost 12 to 13 m ha or just 8.0 %





Dr. C D. Mayee

President Indian Society for Cotton He was Vice Chancellor-MAU Improvement (ISCI), Mumbai and South Asia Mayee has been Alexander Biotechnology Centre (SABC), New Delhi

of National Academy of Agricultural Sciences (NAAS), and also invited as a member of international societies including ISAAA and ABNE, Africa. During his scientific career, Dr. Mayee promoted the production technologies of cotton in rain-fed area. Biotechnology is his passion and he was associated with the first commercial release of Bt cotton in India. He has organised the International Cotton Genomic Initiative Conference and the 5th World Cotton

He was elected as fellow member of several scientific

committees and associations including Vice President

Research Congress in Mumbai as Organising Secretary. Dr. Humboldt Fellow of Germany. He is recipient of several honours

and awards for agriculture development including the life time Achievements Awards and honorary Doctors of Philosophy from many Universities. Currently Dr. Mayee is on the Management Board of many organisations and universities.

of the cultivated area of the country but it is considered the backbone of Indian economy as large number of people are dependent on its production, processing and trade. In the history of cotton, last year was a watershed year in terms of low production, high-cost of raw material and overall non-availability of raw material for

industries. The issue was discussed at highest level when Ministry of Textiles, Ministry of Agriculture, Cotton Association of India, all the cotton researchers and other stake holders conducted series of meetings in the last two months. The conclusion of all these meetings rotated around the primary link of cotton; that is production and productivity. In spite of the largest area, India is among the countries with low productivity. In the last decade, cotton production scenario has undergone dramatic changes and Indian cotton has not only dominated the international production, but attracted the attention of all global players for its persistent growth. Between the 2002 and 2015, due to introduction and large-scale use of Bt cotton, the production rose from mere 15 m bales of 170 kg each to more than 36 m bales and productivity enhanced from 300 kg lint per ha to 550 kg lint per ha.

Despite substantial gains in production in the initial years of insect resistant Bt introduction, the yield got stagnant (around 550 kg lint per ha) for the last nine years. In 2013-14, India's best national average yield was 565.72 kg lint per ha. Compare this to the world's average yield of 940 kg per ha. The yield in few advanced countries even ranged between 1600 to 2200 kg lint per ha which is more than three time higher than what we achieve. Can the yield barrier of 550 kg lint per ha be broken now? Yes, it is possible if a few technical and policy suggestions are implemented.

Technical Suggestions

Seed Technology: Upgradation of seed technology is the first priority. Several new molecular tools are available for creating resistance to pests and diseases including; white flies, pink bollworm, sucking pests and nematodes. The extensively used GM cotton called HT-Bt (Herbicide tolerant Bt) cotton is yet to be given go ahead in spite of the fact that large number of farmers are growing it unofficially. Such seed technologies will save the routine losses to the tune of 20-25% due to weeds, pests and diseases. In USA, the technology of gossypol-free cotton for commercial use has been approved and the scientists have added drought and salinity tolerant traits in cotton. If such technologies are permitted in India, seed alone shall be able to enhance productivity by 25% like what Bt has done earlier. Unfortunately, the planners are not yet clear on the utility of using the new biotechnological tools to improve the cotton crop through seed. Such novel technologies within the biotechnology and beyond for breaking the current yield stagnation of cotton in India are possible, but for the reservations imposed by planners on the use of GM technology in India. So, the urgent policy decision on the use of new genetic technologies has to be taken.

High Density Planting System (HDPS): Nearly 62 % cotton is grown under rain-fed conditions. Studies in India have indicated that HDPS could be another system of planting that could give higher productivity of rainfed cotton. What is of course required is development of short duration (130-140 days) hybrids and varieties that have compact canopy which could fit well in the new system of planting. Fortunately, some good cultivars of both Bt and non Bt cottons are available. State Governments need to promote their cultivation in rain-fed areas. HDPS with compact cultivars shall also allow the use of mechanical pickers and avoid the current constraint of labour for hand picking.

Water and Nutrient Management: Recently it has been clearly demonstrated that some farmers in Maharashtra using drip irrigation with fertigation, harvest nearly 25-30 q seed cotton per ha. Thus, drip irrigation is one of the classical inputs to enhance the cotton yield. Use of controlled irrigation using the sensor-based application of water and nutrients will double the productivity. Currently hardly 5% area is under irrigation, but not under micro irrigation. With the available technologies, nearly 20% of rain-fed area can be brought under proper water use. Croptek-nutrient solution, a new technology specific for cotton has been brought by MAHADHAN fertilizer company where each granule of the fertilizer contains eight macro, micro and supplementary nutrients in precise proportion which supplies the required Nitrogen, Phosphorus, Potash, Sulphur, Magnesium, Zink, Boron and Iron. Already 15% increase in yield has been achieved in large scale trials. This will be a boon for cotton farmers for ease in supply of precise nutrition. A policy support for use of such nutrients and even the use of nano urea will go long way in changing the production scenario of cotton.

Community Approach: Plethora of hybrid seeds in the market has created a huge problem to farmers for selection the right material. Efforts to use one cultivar has given boost to improve not only yield, but also the quality of cotton required for export and mill consumption. This facilitates the use of drone technologies for management of pests, diseases and weeds and also helps implementation of precision farming.

My organisations have shown how the dreaded pest; pink bollworm (PBW) can be managed using farmer's awareness and also using the eco-friendly technologies like PBRobe, a mating disruption tool to manage the PBW. We have tested the technology of mating disruption using community approach on 300 acres in five clusters of 60 acres each in Nagpur districts three villages during 2021-22 crop season. The results were highly encouraging as the demo shown 20% yield increase with 75% suppression of the pest. Encouraged by the results, SABC and Agrovision Foundation has taken the Project Bandhan; tying of PBRobe, in 17 clusters of 60 acres each (total of >1020 acres) in Punjab, Haryana, Rajasthan, Gujarat, Maharashtra, Andhra Pradesh and Telangana. A policy decision for encouraging community approach in cotton cultivation will go a long way in increasing the productivity of cotton. It is not difficult to achieve production of 60 to 75 m bales if the suggested technological and policy interventions are seriously implemented.

ICAR-CICR, Nagpur has identified that out of a total of 157 districts spread across the ten cotton growing states, 115 districts (74%) covering an area of nearly 81% of total cotton area are either inefficient or less efficient in per hectare yield. The average productivity of these districts is still less than 300 kg lint per ha. By adopting the newer technologies, the productivity of cotton in these rain-fed districts can be easily doubled. Community approach in mass technology transfer and concentrated efforts to educate and encourage the farmers will go a long way in boosting the total output of cotton of the country.

Post Harvest Technologies

For achieving the special status for Indian cotton in the international arena and ensure production of assured quality bales, steps need to be taken at both production and processing ends. No precise care is taken from field to ginning, at ginning, bailing, packing uniformity, labelling and even removing the trash and contaminants. Along with ginning, the method of storage of cotton is equally important. There are no adequate storages and warehousing facilities and often open spaces storing attracts maximum contamination. The system of raw cotton sale needs lot of improvement. Traceability must be improved to a large extent, if the Indian cotton has to compete in the world market. It has come to such a sorry state of affairs that Indian cotton sometimes fetches less price than even African cotton.

Conclusion

Indian cotton has the potential to regain the edge and the status of King Cotton, it had globally. Some simple steps would lead to double the production and export with doubling of the farmers' income. The Government must treat cotton as a true commercial crop and regulate the entire inputs, zoning of cultivars, better picking practises and transport to market yards. Total freedom of cultivar and cultivation practices may not be suitable, if the country's production has to double. Allowing new seed technologies, use of HDPS in rain-fed areas, precision use of water and nutrient, sensorbased application of irrigation water and the new technologies like Croptek-nutrient solutions will certainly double not only the yield, but also the income of cotton farmers in India. Proper care in processing, particularly at ginning, packing, labelling stages, bringing uniformity, traceability, etc., can make a sea change in the dominance of Indian cotton in the international market. What is needed is a will and passion to do it by integrating the entire value chain of cotton production, processing, marketing and trade.

Source : CAI Centenary Special 2022

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

Budget Attention to Extra Long Staple (ELS) Cotton

A Cost & Management Accountant (CMA) and Post Graduate in Commerce, he worked in Tariff Commission/Bureau of Industrial Cost & Prices (BICP), then as Deputy Director (Cost) at Ministry of Industry/Ministry of Finance, handling Cost-Price Study of Reputed Industries like Cement then, Sugar, Coal, Pesticides, Manmade Fibres, Paper, Jute, linoleum etc. from 1980 to 1988. Later. He was appointed Director (Economics)/ Financial Survey in the Office of Ret

Textile Commissioner (Ministry of Textiles), through Union Public Service Commission, and retired as Column's



Shri. A.K. Chowdhury Retd. Joint Textile Commissioner, Govt. of India Secretary, All India Cottonseed Crushers' Association

a Consultant in Cotton Corporation of India (CCI) from 1997-2010, handling Statistics/Front Line Demonstrations in Cotton (FLDs) assigned by the Ministry of Agriculture, Govt. of India. Since 2014, he is working as Secretary, AICOSCA (All India Cottonseed Crushers' Association). He has published the following books:-

Compendium of Textile Statistics
Indian Cotton – A Profile
He has also contributed articles
for Monthly Journal of Western
India Regional Council (WIRC)
of Institute of Cost Accounts

Joint Textile Commissioner (Economics). He was also

The Union Budget presented by the Union Finance Minister every year is undoubtedly one of the most excited annual events. This year Smt. Nirmala Sitharaman, in her fifth consecutive Union Budget, decided to spread cheer among all categories, including drawing attention in the Budget for cotton growers for the first time. The two important financial newsPapers viz. The 'Business Standard published from New Delhi/Mumbai and the Hindu Business Line published from Hyderabad/Mumbai had the following headlines:

"Push for Extra Long Staple (ELS) cotton yield to reduce imports" and "Cotton growers get 'Extra Long Staple' attention in Budget"

Union Finance Minister Smt. Nirmala Sitharaman announced in her Budget speech, "To enhance the productivity of extra-long staple cotton, we will adopt a cluster-based and value chain approach through Public Private Partnerships (PPP) Model." She further said, "This will mean collaboration between farmers, state and industry for input supplies, extension services, and market linkages."

The Budget proposal of increasing the productivity of extra-long staple (ELS) cotton

of India.

through public- private partnership is to lower the dependence of a growing cotton variety that is in great demand in the textile industry and is considered a niche produce.

According to one report, India requires 20 lakh bales (each of 170 kgs) of ELS cotton variety while produces only about 5 lakh bales, compelling the industry to depend on importing 15 lakh bales, from countries like Egypt, the United States and Australia, to meet her demand of this high quality fibre. These countries are also the largest producers of ELS cotton.

However, according to another report, of India's domestic consumption of about 31-32 million bales of cotton, extra-long staple cotton accounts for just around one million bales. But here too the domestic production of ELS cotton, according to industry players, is 350,000 to 400,000 lakh bales. This means 600,000 lakh bales need to be imported annually.

What is ELS Cotton?

ELS cotton is cotton which is 32-36 mm length. Extra Long Staple cotton or ELS is used in loom yarns, high end fabrics and in sewing threads. Though India is a major cotton producer, it lags in the production of ELS cotton, forcing it thereby to depend on imports.

According to Shri. Atul S. Ganatra, the President of the Cotton Association of India (CAI), "ELS cotton gets a good price because it is used to produce good quality 60-120 count yarn, which is used to make high-value sarees, bed-sheets, etc. In India, the present price of ELS cotton is around Rs. 70,000 a candy (one candy is 356 kg), while it is sold globally at around Rs. 1.56 lakh a candy." He further said "If ELS cotton production rises, our textile industry will save a lot of foreign exchange and it will benefit farmers too."

According to industry sources, the textile industry for long has been asking the Government to make efforts to increase the availability of ELS cotton to lower the cost of textile production. Though the industry expected much more from the Government in the Budget to raise the sector, which is at present burdened with decreasing yields, and poor returns, such as measures to promote research which will go a long way in promoting ELS varieties, no such announcements were made.

Shri. Ram Kaundinya, Director General, Federation of Seed Industry of India, told Business Line "However, we will wait for the finer details of the announcements made in the Budget."

The difficulty with ELS cotton, which belongs to a particular species called Barbadens, is that it is a long-duration crop with low yields and the incidence of high Pink Bollworm attacks. Hence, farmers do prefer not to plant it.

The President of the National Seed Association of India (NSAI), Shri. M. Prabhakara Rao, welcomed the Government's move and said that "There is a huge potential in the country for ELS cotton."

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

Climate Change Demands New Varieties, Better Water Management, and Flexibility

Climate change used to be something that the world was going to need to address decades from now, but that prediction was far too optimistic because - as farmers know all too well - it's already here.

Rising temperatures and multiple 'storms of the century' will force the cotton industry to scramble for solutions, and everyone will need to chip in. It starts with scientists, who will be tasked with developing more durable and resilient varieties. Farmers will need to improve their water management and adopt regenerative agriculture techniques, and textile manufacturers need to choose more natural fibres. Everyone in the cotton supply chain has a role to play — as indeed, do all humans — even if it's nothing more than making better choices when we shop.

One of the most significant changes climate change has brought is where cotton is grown. As weather patterns change, places where cotton is currently grown are becoming too hot (or too dry, or too wet) so farmers are moving to areas where the climate is better suited to cotton. Of course, picking up a field, family and life to move elsewhere isn't an option for everyone, which will add to the challenges the cotton industry faces going forward.

On the bright side, as the headline indicates, there are tools at our disposal to mitigate the impacts of climate change. Whether or not humanity makes the right choices remains to be seen, but at least we have options.

Price Projections

The Secretariat's current price forecast of the season-average A index for 2022/23 ranges from 85.39 cents to 124.65 cents, with a midpoint at 101.57 cents per pound. The price projection for 2022/23 is based on the ending stocks-tomill use ratio in the world-less-China in 2020/21 (estimate), in 2021/22 (estimate) and in 2022/23 (projection), on the ratio of Chinese net imports to world imports in 2021/22 (estimate) and 2022/23 (projection), and the average price in 2021/22. The projection reflects a 95% confidence interval.

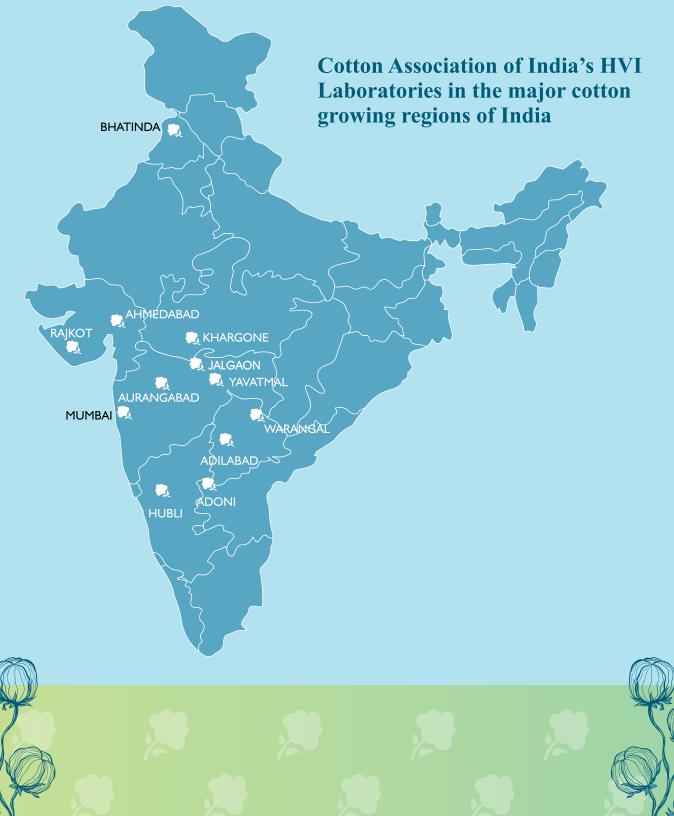
Source: Cotton This Month, March 1, 2023







COTTON ASSOCIATION OF INDIA









COTTON ASSOCIATION OF INDIA

Cotton Testing and Research Laboratory (NABL ACCREDITED & ISO 9001:2015 CERTIFIED)

The CAI's network of independent cotton testing & research laboratories are strategically spread across major cotton centers in India and are equipped with

State-of-the-art technology & world-class Premier and MAG cotton testing machines HVI test mode with trash% tested gravimetrically

CAI LABORATORIES AT DIFFERENT LOCATIONS

Sr.No.	Location	Address	Contact Details
1	Mumbai	2nd floor, Cotton Exchange Building, Opp. Cotton Green Railway Station, Cotton Green, Mumbai 400 033.	Mr. Sanket Shingote - 8691068976 laboratory.mb@caionline.in
2	Rajkot	Maruti Nandan Commercial Complex, In Side Ground Floor, Opp. Galaxy Hotel, Jawahar Road, Rajkot 360 001.	Mr. Hemal Vyas - 9924580810 laboratory.rk@caionline.in
3	Aurangabad	Awargaonkar Complex, Basement of Hotel Ramgiri, CIDCO, Jalna Road, Aurangabad 431 003.	Mr. Prasad Deodikar - 9922794884 laboratory.ag@caionline.in
4	Warangal	House No.8-3-163, Sri Krishna Colony, Ground Floor, Warangal 506 002.	Mr. Akash Gudimalla - 7601055471 laboratory.wl@caionline.in
5	Hubli	Center Point Building, Room No. 305, 3rd Floor, Opp. Sanjevani Pr1ess, New Cotton Market, Hubli – 580 029.	Mr. Pintu Basak - 8453697954 laboratory.hb@caionline.in
6	Bathinda	2nd Floor, Shop No. 4465, Bank Bazaar, Above State Bank of Bikaner & Jaipur Bank, Bathinda 151 001	Mr. Ankit Singh - 9695258862 laboratory.bt@caionline.in
7	Ahmedabad	101, Arth Complex, 1st Floor, Mithakali, 6 Rastha, Opp Passport Office, Near LG Showroom, Navrangpura, Ahmedabad 380 009.	Mr. Brijesh Mishra - 8000090356 laboratory.ah@caionline.in
8	Adilabad	Door No. 3-2-29/13, Ground Floor, Ambedkar Chowk, SBH. Road, Near Canara Bank, Adilabad 504 001	Mr. Satish Bollu - 9640758670 laboratory.ad@caionline.in
9	Khargone	Ground Floor, Hotel P.M. Commercial Area, Opp. Agrawal Hotel, Near Bus Stand, Khargone - 451 001	Mr. Kishna Bisen - 9691073336 laboratory.kh@caionline.in
10	Yevatmal	First Floor, Veer Wamanrao Chowk, Drushti Sankul, Yavatmal 445 001	Mr. Jivan - 9763152502 laboratory.yl@caionline.in
11	Adoni	First Floor, NO. 17/104-7, Agri Market Yard Road, Adoni 518 301.	Mr. Naveen Kumar - 9390240024 laboratory.an@caionline.in
12	Jalgaon	52-B, Karmyog, Jila Peth, Behind Saibaba Mandir, Near Ambedkar Market, Jalgaon 425 001.	Mr. Pushpendra Singh - 8957143110 laboratory.jl@caionline.in

+91-865742947/48 | cai@caionline.in | www.caionline.in

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)]						Spot Rate (Upcountry) 2022-23 Crop March 2023						
Sr. No	. Growth	Grade Standard	Grade	Staple	Micronaire	Gravimetric Trash	Strength /GPT	6th	7th	8th	9th	10th	11th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0 - 7.0	4%	15	18109 (64400)		18109 (64400)	18250 (64900)	18250 (64900)	17969 (63900)
2	P/H/R (SG)	ICS-201	Fine	Below 22mm	5.0 - 7.0	4.5%	15	18250 (64900)		18250 (64900)	18390 (65400)	18390 (65400)	18109 (64400)
3	GUJ	ICS-102	Fine	22mm	4.0 - 6.0	13%	20	13329 (47400)	Н	13244 (47100)	13160 (46800)	13020 (46300)	12879 (45800)
4	KAR	ICS-103	Fine	23mm	4.0 - 5.5	4.5%	21			-	-	-	
5	M/M (P)	ICS-104	Fine	23mm	4.5 - 7.0	4%	22	17013 (60500)		17013 (60500)	17013 (60500)	16928 (60200)	16788 (59700)
6	P/H/R (U) (SG)	ICS-202	Fine	27mm	3.5 - 4.9	4.5%	26	17069 (60700)	0	17069 (60700)	16984 (60400)	16872 (60000)	16675 (59300)
7	M/M(P)/ SA/TL	ICS-105	Fine	26mm	3.0 - 3.4	4%	25	-		-	-	-	-
8	P/H/R(U)	ICS-105	Fine	27mm	3.5 - 4.9	4%	26	17266 (61400)		17266 (61400)	17181 (61100)	17069 (60700)	16872 (60000)
9	M/M(P)/ SA/TL/G	ICS-105	Fine	27mm	3.0 - 3.4	4%	25	16085 (57200)	L	16085 (57200)	16028 (57000)	15916 (56600)	15775 (56100)
10	M/M(P)/ SA/TL	ICS-105	Fine	27mm	3.5 - 4.9	3.5%	26	16591 (59000)		16591 (59000)	16450 (58500)	16338 (58100)	16197 (57600)
11	P/H/R(U)	ICS-105	Fine	28mm	3.5 - 4.9	4%	27	17575 (62500)	Ι	17575 (62500)	17491 (62200)	17378 (61800)	17181 (61100)
12	M/M(P)	ICS-105	Fine	28mm	3.7 - 4.5	3.5%	27	17069 (60700)		17069 (60700)	16984 (60400)	16872 (60000)	16703 (59400)
13	SA/TL/K	ICS-105	Fine		3.7 - 4.5	3.5%	27	17069 (60700)		17069 (60700)	17041 (60600)	16928 (60200)	16759 (59600)
		ICS-105	Fine	28mm	3.7 - 4.5	3%	27	17238 (61300)	D	17238 (61300)	17181 (61100)	17069 (60700)	16928 (60200)
15	R(L)	ICS-105	Fine	29mm	3.7 - 4.5	3.5%	28	17434 (62000)		17434 (62000)	17350 (61700)	17238 (61300)	17013 (60500)
16	M/M(P)	ICS-105	Fine	29mm	3.7 - 4.5	3.5%	28	17378 (61800)		17378 (61800)	17294 (61500)	17181 (61100)	17013 (60500)
	SA/TL/K	ICS-105				3%	28	17378 (61800)	А	17378 (61800)	17350 (61700)	17238 (61300)	17069 (60700)
	GUJ	ICS-105			3.7 - 4.5	3%	28	17547 (62400)		17547 (62400)	17491 (62200)	17378 (61800)	17238 (61300)
	M/M(P)	ICS-105	Fine	30mm	3.7 - 4.5	3.5%	29	17547 (62400)		17547 (62400)	17462 (62100)	17350 (61700)	17181 (61100)
20	SA/TL/K/O	ICS-105				3%	29	17603 (62600)	Y	17603 (62600)	17519 (62300)	17406 (61900)	17238 (61300)
	M/M(P)	ICS-105				3%	30	17687 (62900)		17687 (62900)	17603 (62600)	17519 (62300)	17350 (61700)
	SA/TL/ K / TN/O	ICS-105				3%	30	17744 (63100)		17744 (63100)	17659 (62800)	17575 (62500)	
	SA/TL/K/ TN/O				3.5 - 4.2	3%	31	N.A. (N.A.)		N.A. (N.A.)	N.A. (N.A.)	N.A. (N.A.)	N.A. (N.A.)
	M/M(P)	ICS-107			2.8 - 3.7	4%	33	19965 (71000)		19965 (71000)	20106 (71500)	19965 (71000)	19825 (70500)
	K/TN	ICS-107				3.5%	34	20246 (72000)		20246 (72000)	20387 (72500)	20246 (72000)	20106 (71500)
	M/M(P)	ICS-107				4%	35	20528 (73000)		20528 (73000)	20668 (73500)	20528 (73000)	20387 (72500)
27	K/TN	ICS-107	Fine	35mm	2.8 - 3.7	3.5%	35	20668 (73500)		20668 (73500)	20809 (74000)	20668 (73500)	20528 (73000)

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