

Intercropping in Cotton for Self Sufficiency in Pulses and Oilseeds

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During the Bt cotton era, the area under cotton increased from 86 lakh ha in 2000-2001 to around 130 lakh ha in 2020-21. It is believed that some of this gain in area under cotton is at the expense of acreage under coarse cereals, pulses and oilseeds. It may be recalled that the Technology Mission on Oilseeds was launched by the Government of India in 1986 and this mission was rechristened as Integrated Scheme on Oilseeds, Pulses, Oilpalm and Maize (ISOPOM) in 1995-96. During 2007, the ISOPOM was merged with the National Food Security Mission (NFSM). The main objectives behind these schemes were to attain

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self sufficiency in edible oil and pulses. Despite gains from these schemes, the demand for pulses

and oilseeds continue to out-strip domestic production. In the last few years, India imported around 3 million tonnes of pulses / annum. Similarly, our edible oil import bill is around 60 thousand crore rupees per year. Considering the current land use scenario, limits to the increase the net sown area and the market dynamics, there is

> hardly any possibility of a significant horizontal expansion of area under pulses and oilseeds in the country. Hence their production can be increased either by

increasing yields or through some alternate measures for area expansion. One such avenue is the intercropping of pulses and oilseeds in between the rows of widely spaced, long duration crops of cotton.

Intercropping and its Benefits

The concept of intercropping in cotton is not new. Our ancestors cultivated cotton for hundreds of years but never raised it as a monocrop. Traditionally, rainfed cotton was mixed cropped with cereals, pulses and oilseed crops in order to shield them against the vagaries of nature and also to meet the diverse dietary needs. Indirectly, such mixed cropping systems improved agrobiodiversity and soil, plant, animal and human health. In simple terms, intercropping is the practise of growing two or more crops in the same piece of land. In cotton based intercropping systems, the main (base) crop of cotton provides the main source of income and the intercrops that are planted in the vacant spaces between cotton rows provide extra monetary returns and a host of other benefits.

There are several variants of intercropping including mixed cropping (two or more crops are mixed and sown with no distinct row arrangement), row intercropping (where the base crop and intercrops are sown in distinct separate rows), strip intercropping (where cotton and other crops are cultivated in alternate strips of uniform width in the same field). Based on the proportion and pattern of planting main and intercrops, the intercropping systems are referred as alternate rows or paired rows, skip rows, additive series, etc. Several combinations such as 1:1, 2:1, 2:2, 4:2, and strips of 6:2, 8:2, and 10:2 are in vogue.

Intercropping was once a widely adopted practice in Asia, Latin America and Africa to enhance crop productivity by maximising resource use. However, the current cotton production systems encourage monoculture, replacing biodiversity with few cultivars having a narrow genetic diversity. Such systems are not sustainable in the long run. On the other hand, an efficient cotton based intercropping system has the potential to restore sustainability through enhanced crop diversification, efficient resource management and soil fertility build up. Intercropping systems exploit temporal complementarily, since the component crops meet their major demands on resources at different times during the crop season

Cotton Pulse Intercropping

Intercropping cotton with pulses is one way to attain self-sufficiency in pulses, improve soil fertility and to generate additional farm income. Cotton+pulse intercropping systems not only permit better utilisation of natural resourceslight, heat, nutrients and water - but will also reduce pest incidence by enhancing biological control by harbouring natural enemies of cotton pests.

Cotton is a widely spaced crop and has a very slow growth during the initial 40-50 days. The inter-row spaces remain sub-optimally used during this phase. Slot duration pulsesgreengram, black gram and cowpea-can profitably be intercropped in cotton. These intercrops are either grown as 1 or 2 rows between 2 rows of cotton crop whose proportion is not altered. Both normal and paired row configurations have been tried and found to be successful. Another variant, the strip cropping of cotton and pigeon pea is very common in Maharashtra where 2 rows of pigeon pea are raised after 6-8 rows of cotton. Even in the irrigated regions of North India, intercropping cotton with legumes like black gram was found more profitable than sole-cropping systems. After the introduction of Bt hybrids, this practice has been discontinued in many areas.

Studies from different locations across India over several years indicate that 200-600 kg/ha of yield from intercrop can easily be harvested without adversely affecting the main crop of cotton. Positive soil nitrogen balance was also observed in several cotton+ pulse intercropping studies. Summarised results of 60 on-farm demonstrations on intercropping, each with green gram and black gram, conducted in Aurangabad district, Maharashtra, during 2014-2016 are presented in Table 1.

Table 1: Yield and economics of demonstrations of cotton+pulse intercropping system
in farmers' fields

System	Cotton yield (kg/ha)	Intercrop yield (kg/ha)	Gross returns (Rs/ha)
Sole cotton	1567	0	73050
Cotton+green gram intercropping	1490	627	99324
Cotton+black gram intercropping	1441	505	94098

Cotton Oilseed Intercropping

Cotton is both a fibre and an oilseed crop. Thus, the production of cotton seed oil also increased from 0.53 million tonnes in 2000 to 1.4 million tonnes in 2020. There has been a significant replacement of groundnut and soybean by Bt cotton in the states of Gujarat, Maharashtra, Andhra Pradesh and Madhya Pradesh. Bt cotton hybrids are sown at 90-120 cm row to spacing and short duration oilseed crops can be profitably grown in the inter row-spacing that remains vacant during the initial phase of cotton crop. Groundnut and soybean are two oilseed crops that can profitably be intercropped with cotton. Other crops like sesame, safflower, and sunflower have also been experimented with, but are not very popular. Detailed studies on oilseed based intercropping systems have indicated an additional yield advantage of 400-500 kg/ha of groundnut/soybean without significantly decreasing the yield of main cotton crop. Additionally, intercropped groundnut/ soybean benefited the base crop of cotton by either transferring a part of fixed N2 or sparing effect because of their less N requirement. In addition to economic advantage, the intercrops minimise the risk of complete crop failure and provide nutritional fodder for farm animals. This practice also helps in the conservation of soil and better utilisation of rainwater.

The different pulse and oilseed based intercropping systems recommended for different locations are presented in Table 2.

Why Intercropping is Not Favoured by Farmers

Despite several advantages, the adoption rate of cotton based intercropping system in India is not encouraging and there is a discontinuation of this practice in the traditional belt. The following reasons are attributed for low rate of adoption (and discontinuation) of intercropping in cotton.

- Intercropping technology is labour intensive and labour scarcity as well as high wages is a major bottleneck in increased adoption.
- Weeding is labour intensive in cotton. Mechanical weeding using blade harrows, power weeder and tractor drawn implements are becoming popular. These equipments operate well under sole crop situation. Special modifications are needed for intercropped cotton due to narrow row spacing.
- Adoption of chemical-based weed control is recently gaining momentum in cotton. Choice of herbicides is further limited under intercropped situation due to lack of selectivity among certain post emergence herbicides among both base and intercrops.
- Rain aberration like continuous wet spell and dry spell is not uncommon in this era of climate change. Often, the harvesting period of intercrops coincide with rains and the quantity and quality of harvested intercrop are adversely affected.

State	Pulse	Oilseed			
Punjab	Green gram				
Madhya Pradesh	idhya Pradesh Black gram				
Gujarat Black gram		Groundnut, Sesame			
Maharashtra	Green gram, Black gram, Pigeon pea	Soybean, Groundnut			
Odisha	Pigeon pea, Black gram	Soybean			
Karnataka	Black gram, Cowpea	Soybean, Groundnut			
Tamil Nadu	Green gram	Soybean Groundnut			
Andhra Pradesh	Blackgram, Pigeon pea	Pigeon pea			
Telangana	Pigeon pea, Green gram	Soybean			

Table 2: Recommended pulse and oilseed based intercropping systems in cotton



Cotton+Green gram



Cotton+Groundnut

- Non-availability of a complete package of production including choice of varieties of cotton and intercrop also comes in the way ofpopularising intercropping.
- Success of intercropping depends upon complimentarily among crops grown together. If crops or varieties of the crops are not chosen properly, inter-species competition may limit yields and farm profits. There are no specific plant breeding programmes to develop and evaluate varieties under intercropped conditions. Hence the best varietal combinations are seldom available for recommendation in the package of practices.

The Way Forward

- Empowering women cotton farmers with knowledge and skill to enable them act as drivers of this change. Women understand the benefits of integrating pulses, oilseeds and leguminous vegetables in the production systems for enhanced availability of food grains and nutrition for farm families.
- There is a need for fine-tuning the package of practices, including the varieties/hybrid of cotton and intercrop, for different agroecological situations. Demonstrations are being conducted under National Food Security Mission by different centresof All India Coordinated Research Projects. These need to be upscaled appropriately.



Cotton +Soybean

 Wide spread adoption of intercropping system will only occur with institutional support, enabling policies and incentivised markets. These strongly influence the adoption behaviour of individual farmer.

Intercropping systems in cotton clearly have the potential to increase the production of pulses and oilseed crops. Selection of appropriate crops/varietal combination, planting rates, and changes in the spatial arrangement of the crops can reduce competition and maximise benefits. Even if intercropping with oilseeds is adopted in an additional 2.0millionhectarearea, with an minimum intercrop yield of 0.3 tonnes/ha, the production of oilseeds can be enhanced by another 0.6 million tonnes without any expansion in area.

Similarly, through targeted planning it is possible to introduce short duration pulses as intercrops in around 3.0 million hectares, particularly in assured rainfall areas where cotton is cultivated. Presuming that an average of 0.25 tonnes/ha of pulse yield is realized around 0.75 million tonnes of pulses can be produced without any horizontal expansion in area. Apart from saving our precious foreign exchange, such practices would restore soil health and improve the nutritional status of farm families and the health of farm animals.

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

CAI Maintains its Cotton Crop Estimate for 2020-21 Season at 360 Lakh Bales

Cotton Association of India (CAI) has released its April estimate of the cotton crop for the season 2020-21 beginning from 1st October 2020. The CAI has estimated cotton crop for the 2020-21 season at 360.00 lakh bales of 170 kgs. each (i.e. 382.50 lakh running bales of 160 kgs. each) i.e. at the same level as in the previous estimate. A statement containing the state-wise break-up of the Cotton Production and the Balance Sheet as on 30th April 2021 drawn by the Crop Committee of the CAI with the corresponding data for the previous crop year are given below.

The total cotton supply for the months of October 2020 to April 2021 is estimated by the CAI at 469.37 lakh bales of 170 kgs. each (equivalent to 498.71 lakh running bales of 160 kgs. each), which consists of the arrivals of 336.37 lakh bales of 170 kgs. each (equivalent to 357.39 lakh running bales of 160 kgs. each), imports of 8 lakh bales of 170 kgs. each (equivalent to 8.50 lakh running bales of 160 kg. each) and the opening stock estimated by the CAI at 125 lakh bales of 170 kgs. each (equivalent to 132.81 lakh running bales of 160 kgs. each) at the beginning of the season.

Further, the CAI has estimated cotton consumption for the months of October 2020 to April 2021 at 190 lakh bales of 170 kgs. each (equivalent to 201.88 lakh running bales of 160 kgs. each) while the export shipments upto 30th April 2021 are estimated by the CAI at 50 lakh bales of 170 kgs. each (equivalent to 53.13 lakh running bales of 160 kgs. each). Stock at the end of April 2021 is estimated at 229.37 lakh of 170 kgs. each (equivalent to 243.71 lakh running bales of 160 kgs. each) including 95.00 lakh bales of 170 kgs. each (equivalent to 100.94 lakh running bales of 160 kgs. each) with textile mills and the remaining 134.37 lakh bales of 170 kgs. each (equivalent to 142.77 lakh running bales of 160 kgs. each) with the CCI, Maharashtra Federation and others (MNCs, traders, ginners, MCX, etc. including the cotton sold but not delivered).

The CAI Crop Committee has estimated the total cotton supply till end of the cotton season 2020-21 at the same level i.e. at 496.00 lakh bales of 170 kgs. each (equivalent to 527 lakh running bales of 160 kgs. each)upto 30th September 2021. The

total cotton supply consists of the opening stock of 125 lakh bales of 170 kgs. each at the beginning of the cotton season on 1st October 2020, crop for the season estimated at 360 lakh bales of 170 kgs. each (equivalent to 382.50 lakh running bales of 160 kgs. each) and the imports estimated by the CAI at 11 lakh bales of 170 kgs. each (equivalent to 11.69 lakh running bales of 160 kgs. each). The imports estimate for the previous cotton season 2019-20 was of 15.50 lakh bales of 170 kgs. each (equivalent to 16.47 lakh running bales of 160 kgs. each).

The domestic consumption estimated by the CAI has been reduced by 15 lakh bales to 315 lakh bales of 170 kgs. each (equivalent to 334.69 lakh running bales of 160 kgs. each) from its previous estimate of 330 lakh bales of 170 kgs. each (equivalent to 350.63 lakh running bales of 160 kgs. each). The exports for the season have been estimated by CAI at 65 lakh bales of 170 kgs. each (equivalent to 69.06 lakh running bales of 160 kgs. each) which are higher by 5 lakh bales than 60 lakh bales (equivalent to 63.75 lakh running bales of 160 kgs. each) estimated previously. The exports estimate for the previous cotton season 2019-20 was of 50 lakh bales of 170 kgs. each (equivalent to 53.13 lakh running bales of 160 kgs. each).

The carry-over stock at the end of the cotton season 2020-21 on 30th September 2021, is estimated by the CAI at 116 lakh bales of 170 kgs. each (equivalent to 123.25 lakh running bales of 160 kgs. each) as against 107.50 lakh bales of 170 kgs. each (equivalent to 114.22 lakh running bales of 160 kgs. each) estimated for the previous cotton season 2019-20.

Highlights of Deliberations held by the CAI Crop Committee on 10th May 2021

The Crop Committee of the Cotton Association of India (CAI) held its meeting on 10th May 2021, which was attended by in all 21 members representing all cotton producing states and stakeholders. The Committee arrived at the April estimate of the cotton crop for the 2020-21 crop year and drawn the estimated cotton balance sheet based on the data available from various trade sources, upcountry associations and other stakeholders. The following are the highlights of the deliberations held at this meeting:-

1. Consumption

The CAI has reduced its consumption estimate for the current crop year by 15 lakh bales to 315 lakh bales of 170 kgs. each from its previous estimate of 330 lakh bales of 170 kgs. each. The cotton consumption this year is likely to take a hit because of the ongoing COVID-19 Pandemic and lockdown in most of the states. The consumption now estimated for the current crop year is, however, higher by 65 lakh bales compared to the previous year's consumption estimate of 250 lakh bales of 170 kgs. each (equivalent to 265.63 lakh running bales of 160 kgs. each).

Upto 30th April 2021, the consumption is estimated at 190 lakh bales of 170 kgs. each (equivalent to 201.88 lakh running bales of 160 kgs. each).

2. Production

The CAI has retained its production estimate for the season 2020-21 at 360.00 lakh bales of 170 kgs. each (equivalent to 382.50 lakh running bales of 160 kgs. each) made during the last month.

The Committee members will have a close watch on the cotton arrivals in the subsequent months and if any addition or reduction is required to be made in the production estimate, the same will be made in the CAI reports.

3. Imports

The estimate of cotton Imports into India has been retained at 11 lakh bales of 170 kgs. each (equivalent to 11.69 lakh running bales of 160 kgs. each). The imports now estimated for the 2020-21 crop year are less by 4.50 lakh bales of 170 kgs. each from 15.50 lakh bales of 170 kgs. each (equivalent to

CAI's Estimates of Cotton Crop as on 30th April 2021 for the Seasons 2020-21 and 2019-20 (*in lakh bales of 170 kg.*)

		Production	Arrivals as on 30th April 2021				
State	2020	0-21	2019	9-20	2020-21		
	In running b/s of 160 Kgs. each	In lakh b/s of 170 Kgs. each	In running b/s of 160 Kgs. each	In lakh b/s of 170 Kgs. each	In running b/s of 160 Kgs. each	In lakh b/s of 170 Kgs. each	
Punjab	11.16	10.50	10.09	9.50	10.89	10.25	
Haryana	23.91	22.50	27.09	25.50	23.16	21.80	
Upper Rajasthan	20.72	19.50	13.81	13.81 13.00 20.68		19.46	
Lower Rajasthan	13.81	13.00	15.94	15.00	13.07	12.30	
Total North Zone	69.59	65.50	66.94	63.00	67.80	63.81	
Gujarat	103.06	97.00	100.94	95.00	91.38	86.00	
Maharashtra	85.00	80.00	92.44 87.00 81.8		81.81	77.00	
Madhya Pradesh	19.13	18.00	19.13	19.13 18.00 18.33		17.25	
Total Central Zone	207.19	195.00	212.50	200.00	191.52	180.25	
Telangana	51.00	48.00	55.25	52.00	49.14	46.25	
Andhra Pradesh	17.00	16.00	16.20	15.25	15.78	14.85	
Karnataka	24.97	23.50	21.25	20.00	23.64	22.25	
Tamil Nadu	7.44	7.00	5.31 5.00 4.25		4.00		
Total South Zone	100.41	94.50	98.02	92.25	92.81	87.35	
Orissa	3.19	3.00	3.98	3.75	3.15	2.96	
Others	2.13	2.00	1.06	1.00	2.13	2.00	
Total	382.50	360.00	382.50	360.00	357.39	336.37	

* Including loose

16.47 lakh running bales of 160 kgs. each) estimated for the 2019-20 crop year.

Upto 30th April 2021, about 8.00 lakh bales of 170 kgs. each (equivalent to 8.50 lakh running bales of 160 kgs. each) are estimated to have arrived the Indian Ports.

4. Exports

The estimate of cotton exports for the 2020-21 crop year has been increased by 5 lakh bales to 65 lakh bales of 170 kgs. each (equivalent to 69.06 lakh running bales of 160 kgs. each.

Upto 30th April 2021, about 50 lakh bales of 170 kgs. each (equivalent to 53.13 lakh running bales of 160 kgs. each) are estimated to have been shipped.

5. Arrivals

Indian cotton arrivals during the months of October 2020 to April 2021 are estimated at 336.37 lakh bales of 170 kgs. each (equivalent to 357.39 lakh running bales of 160 kgs. each).

The Balance Sheet drawn by the Association for 2020-21 and 2019-20 is reproduced below:-

	(in lukn bules of 170			
Details	2020-21	2019-20		
Opening Stock	* 125.00	32.00		
Production	360.00	360.00		
Imports	11.00	15.50		
Total Supply	496.00	407.50		
Mill Consumption	278.00	218.00		
Consumption by SSI Units	22.00	18.00		
Non-Mill Use	15.00	14.00		
Total Domestic Demand	315.00	250.00		
Available Surplus	181.00	157.50		
Exports	65.00	50.00		
Closing Stock	116.00	107.50		

* One time adjustment of 17.50 lakh bales made in the Opening stock i.e. 107.50 lakh bales to 125.00 lakh bales by the CAI Statistics Committee in the meeting held on 6th January 2021.

6. Stock as on 30th April 2021

The cotton stocks held by mills in their godowns on 30th April 2021 are estimated at 95 lakh bales of 170 kgs. each (equivalent to 100.94 lakh running bales of 160 kgs. each). The mills have on an average 109 days' cotton stock in their godowns.

The CCI, Maharashtra Federation, MNCs, Ginners, Traders, MCX, etc. are estimated to have a total stock of about 134.37 lakh bales of 170 kgs. each (equivalent to 142.77 lakh running bales of 160 kgs. each) as on 30th April 2021.

Thus, the total stock held by spinning mills and stockists including the stock of cotton sold but not delivered on 30th April 2021 is estimated at 229.37 lakh bales of 170 kgs. each (equivalent to 243.71 lakh running bales of 160 kgs. each).

7. Closing stock as on 30th September 2021

Closing stock as on 30th September 2021 is estimated by the Committee at 116 lakh bales of 170 kgs. each (equivalent to 123.25 lakh running bales of 160 kgs. each).

Details	In lakh b/s of 170 kg.	In '000 Tons	
Opening Stock as on 01.10.2020	125.00	2125.00	
Arrivals upto 30.04.2021	336.37	5718.29	
Imports upto 30.04.2021	8.00	136.00	
Total Available	469.37	7979.29	
Consumption	190.00	3230.00	
Export Shipments upto 30.04.2021	50.00	850.00	
Stock with Mills	95.00	1615.00	
Stock with CCI, Maha. Fedn., MCX, MNCs, Ginners, Traders & Exporters	134.37	2284.29	
Total	469.37	7979.29	

Balance Sheet of 7 months i.e. from 1.10.2020 to 30.04.2021 for the season 2020-21

	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)]								Sŗ	oot Rate	(Upcou May	ntry) 20 7 2021	20-21 C:	rop
Sr. No	o. Growth	Grade Standard	Grade	Staple	Micronaire	Gravimetric Trash	Strength /GPT	10th	11th	12th	13th	14th	15th
1	P/H/R	ICS-101	Fine	Below 22mm	5.0 - 7.0	4%	15	10826 (38500)	10826 (38500)	10854 (38600)	10854 (38600)	10854 (38600)	10826 (38500)
2	P/H/R (SG)	ICS-201	Fine	Below 22mm	5.0 - 7.0	4.5%	15	10967 (39000)	10967 (39000)	10995 (39100)	10995 (39100)	10995 (39100)	10967 (39000)
3	GUJ	ICS-102	Fine	22mm	4.0 - 6.0	13%	20	8323 (29600)	8323 (29600)	8352 (29700)	8352 (29700)	8352 (29700)	8352 (29700)
4	KAR	ICS-103	Fine	23mm	4.0 - 5.5	4.5%	21	9392 (33400)	9392 (33400)	9420 (33500)	9420 (33500)	9420 (33500)	9420 (33500)
5	M/M (P)	ICS-104	Fine	24mm	4.0 - 5.5	4%	23	10770 (38300)	10770 (38300)	10798 (38400)	10798 (38400)	10798 (38400)	10798 (38400)
6	P/H/R (U) (SG)	ICS-202	Fine	27mm	3.5 - 4.9	4.5%	26	11951 (42500)	11951 (42500)	12007 (42700)	11951 (42500)	11895 (42300)	11838 (42100)
7	M/M(P)/ SA/TL	ICS-105	Fine	26mm	3.0 - 3.4	4%	25	10742 (38200)	10742 (38200)	10770 (38300)	10770 (38300)	10770 (38300)	10742 (38200)
8	P/H/R(U)	ICS-105	Fine	27mm	3.5 - 4.9	4%	26	12092 (43000)	12092 (43000)	12148 (43200)	12092 (43000)	12035 (42800)	11979 (42600)
9	M/M(P)/ SA/TL/G	ICS-105	Fine	27mm	3.0 - 3.4	4%	25	11051 (39300)	11051 (39300)	11079 (39400)	11051 (39300)	11051 (39300)	11023 (39200)
10	M/M(P)/ SA/TL	ICS-105	Fine	27mm	3.5 - 4.9	3.5%	26	11726 (41700)	11726 (41700)	11754 (41800)	11754 (41800)	11754 (41800)	11726 (41700)
11	P/H/R(U)	ICS-105	Fine	28mm	3.5 - 4.9	4%	27	12.288 (43700)	12.288 (43700)	12.345 (43900)	12.288 (43700)	12.232 (43500)	12.176 (43300)
12	M/M(P)	ICS-105	Fine	28mm	3.7 - 4.5	3.5%	27	12570 (44700)	12570 (44700)	12598 (44800)	12570 (44700)	12541 (44600)	12513 (44500)
13	SA/TL/K	ICS-105	Fine	28mm	3.7 - 4.5	3.5%	27	12598 (44800)	12598 (44800)	12626 (44900)	12598 (44800)	12570 (44700)	12541 (44600)
14	GUJ	ICS-105	Fine	28mm	3.7 - 4.5	3%	27	12654 (45000)	12654 (45000)	12710 (45200)	12710 (45200)	12654 (45000)	12654 (45000)
15	R(L)	ICS-105	Fine	29mm	3.7 - 4.5	3.5%	28	12513 (44500)	12513 (44500)	12570 (44700)	12513 (44500)	12457 (44300)	12401 (44100)
16	M/M(P)	ICS-105	Fine	29mm	3.7 - 4.5	3.5%	28	12935 (46000)	12935 (46000)	12963 (46100)	12935 (46000)	12907 (45900)	12879 (45800)
17	SA/TL/K	ICS-105	Fine	29mm	3.7 - 4.5	3%	28	12963 (46100)	12963 (46100)	12991 (46200)	12963 (46100)	12935 (46000)	12907 (45900)
18	GUJ	ICS-105	Fine	29mm	3.7 - 4.5	3%	28	12991 (46200)	12991 (46200)	13048 (46400)	13048 (46400)	12991 (46200)	12991 (46200)
19	M/M(P)	ICS-105	Fine	30mm	3.7 - 4.5	3.5%	29	13498 (48000)	13498 (48000)	13526 (48100)	13526 (48100)	13498 (48000)	13469 (47900)
20	SA/TL/K/O	ICS-105	Fine	30mm	3.7 - 4.5	3%	29	13526 (48100)	13526 (48100)	13554 (48200)	13554 (48200)	13526 (48100)	13498 (48000)
21	M/M(P)	ICS-105	Fine	31mm	3.7 - 4.5	3%	30	13638 (48500)	13638 (48500)	13666 (48600)	13666 (48600)	13638 (48500)	13610 (48400)
22	SA/TL/ K / TN/O	ICS-105	Fine	31mm	3.7 - 4.5	3%	30	13666 (48600)	13666 (48600)	13694 (48700)	13694 (48700)	13666 (48600)	13638 (48500)
23	SA/TL/K/ TN/O	ICS-106	Fine	32mm	3.5 - 4.2	3%	31	13779 (49000)	13779 (49000)	13807 (49100)	13807 (49100)	13779 (49000)	13751 (48900)
24	M/M(P)	ICS-107	Fine	34mm	3.0 - 3.8	4%	33	21090 (75000)	21090 (75000)	21090 (75000)	21090 (75000)	21090 (75000)	21090 (75000)
25	K/TN	ICS-107	Fine	34mm	3.0 - 3.8	3.5%	34	21652 (77000)	21652 (77000)	21652 (77000)	21652 (77000)	21652 (77000)	21652 (77000)

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