राज्यस्तरीय बँकर समिती,
महाराष्ट्र राज्य

STATE LEVEL BANKERS' COMMITTEE,
MAHARASHTRA STATE

संयोजक / CONVENER
बैंक ऑफ महाराष्ट्र
Bank of Maharashtra
भारत सरकार का उद्यम
एक परिवार एक बैंक

प्र.का.: 'लोकमंगल', 1501, शिवाजीनगर, पुणे- 411005.
H.O. : 'Lokmangal', 1501, Shivajinagar, Pune - 411005.

AX1 / SLBC / Unit Cost / 2018-19 / 356 - 433

Date : 17.04.2018

All Member Banks
All Lead District Managers
SLBC Maharashtra

Dear Sir,

Sub : Approved Unit Costs for various investment activities in agriculture and allied sectors for 2018-19

A meeting of State Level unit Cost Committee was convened by NABARD, Maharashtra R.O. on 23.03.2018. NABARD has provided copy of Unit Costs for various investment activities in agriculture and allied sectors for 2018-19. The same is enclosed herewith.

The Unit Costs approved for the year 2018-19 are indicative and banks can increase / decrease the same by 10-20% wherever found necessary.

All Member Banks and Lead District Managers are requested to note the contents for information, dissemination to all concerned and further necessary action.

Thanks and regards,

Yours faithfully,

Dy. Gen. Manager,
Member Secretary,
SLBC, Maharashtra.

राज्यस्तरीय बैंकर समिति, महाराष्ट्र

Annexure I

Minor Irrigation

Unit Cost 2018-19

Sr	Item of Investment	Specifications	(Rs)
1	Dug-well in Sandstone and Metamorphic formation in Vidarbha region (applicable to Gadchiroli, Chandrapur, Bhandara districts and part of Nagpur district)	dia 3m,depth 18m, depth of lining 8m	130000
2	Dug-cum-borewell in alluvial formation of Tapi & Purna basins in Vidarbha Region Akola, Amravati, Buldhana & Dhule dists.	dia 3m,20m depth, RCC lining of 0.45m thickness,20m height Boring-150mm dia, 20m depth	110000
	DUG WELLS IN DECCAN TRAP		
3	Dug well in Konkan region (Thane, Raigad, Ratnagiri and Sindhudurg districts)	dia 4.5 m, 10 m depth of lining 3 m	100000
4	Dug well in Pune region (Pune, Sangli, Satara, Solapur and Kolhapur districts)	dia 4.5 m, 15 m depth of lining 4 m	130000
5	Dug well in Amravati region (Amravati, Akola, Washim, Yavatmal and Buldana districts)	dia 4.5 m, 15 m depth of lining 4 m	100000
6	Dug well in Nagpur region (Chandrapur, Nagpur, Gadchiroli, Wardha, Bhandara & Gondia districts)	dia 4.5 m, 15 m depth of lining 4 m	100000
7	Dugwell in Aurangabad region (Aurangabad, Beed, Osmanabad, Parbhani, Hingoli, Nanded, Latur & Jalna districts)	dia 6.0 m, depth 15 m, depth of lining 4 m	110000
8	Dugwell in Nasik (East) region (Ahmednagar, Nasik, Dhule & Nandurbar districts)	dia 5.0 m, depth 15 m depth of lining 4 m, boring 150 mm x 15 m	115000
9	Dug well in Nasik (West) region (Akkalkuwa & Akrani in Nandurbar district, Akole in A'Nagar dist. and Surgana, Peint, Igatpuri & Kalwan in Nasik dist.	dia 5.0 m, 10 m depth of lining 4 m	100000
	BORE WELLS		
10	Bore well in Sandstone & Metamorphic formation in Vidrarbha Region (applicable to Gadchiroli, Gondia, Chandrapur, Bhandara districts & part of Nagpur district, Dhadgaon and Akkalkua tehsils of Nandurbar district and Dharani and Chikaldara of Amravati dictrict) 150 mm dia. Well drilling, PVC casing pipe of 180 mm dia, bore well yield testing, survey charges		30000
11	Tube-cum-borewell in alluvial formation of Tapi & Purna basins in Vidarbha Region Akola, Amravati, Buldhana , Dhule& Jalgaon dists.		195000

12	Bore well in Lateritic formation (generally in Konkan Region i.e., Thane, Raigad, Ratnagiri & Sindhudurg districts Bore well drilling 150 mm dia, MS casing 150 mm dia, bore well yield testing, survey charges	35000
13	Bore well in Deccan Trap formation i.e Pune Region (Pune, Sangli, Satara, Solapur & Kolhapur districts), Nasik (East) Region (Ahmednagar, Nasik, Dhule & Nandurbar districicts), Nasik (West) Region (Akkalkuwa & Akrani in Nandurbr district, Akole in A'Nagar district & Surgana, Peint, Igatpur & Kalwan in Nasik dist. Aurangabad Region (Aurangabad, Beed, Osmanabad, Parbhani, Hingoli, Nanded, Latur & Jalna districts), etc 150 mm dia. Well drilling, PVC casing pipe of 180 mm dia, bore well yield testing, survey charges	26000

Unit Cost for dugwell may be considered as per the cost calculated under govt. programmes in the district.

PUMPING SYSTEM

Sr	Item of Investment	UNIT COST 2018-19 (Rs)
a	PUMPSETS	
i	Submersible Pumpsets	
1	3 HP	40,000
2	5 HP	55,000
ii	Electric Pumpsets with accessories and installation charges	
1	2 HP	15,000
2	3 HP	20,000
3	5 HP	30,000
4	7.5 HP	35,000
iii	Diesel Pumpsets with accessories & installation charges	
1	5 HP	35,000
2	7.5 HP	40,000
iv	Petrol start Kerosene run pumpsets with accessories and installation charges	
1	2 HP	15,000
2	3.5 HP	20,000
b	PUMPHOUSE	
1	Pumphouse (2.5 m x 2.5 m x 2.1 m)	15000

For solar pumpsets bench cost and subsidy available as per circular No.252 / DOR.GSS.60 / 2014 dated 17/12/2014 addressed to CBs, RRBs, StCB and SCARDBs.

Drip Irrigation Systems with Drippers for various Plantation and Horticulture Crops and Floriculture

Sr	Crop	Specifications	(Rs) / ha.
i	Mango / Chiku / Tamarind	10 x 10m	25000
ii	Coconut	8 x 8m	41000
iii	Coconut	7 x 7m	34000
iv	Guava, Lemon, Orange, Mosambi, Cashew	6 x 6m	40000
v	Custard Apple, Pomegranate, Ber, Fig, Drumstick	5 x 5m	36000
vi	Papaya, Arecanut, Tondali, Drumstick	3 x 3m	58000
vii	Grape	3 x 1.5m	60000
viii	Grape	1.80 x 1.20m	100000
ix	Banana	2.50 x 2.50m	60000
x	Banana	1.50 x 1.50m	85000
xi	Sugarcane	1.40 x 0.60 x 0.30m	100000
	Sugarcane	sub surface irrigation (per 0.4 ha)	50000
xii	Cotton pair row, Sugarcane	2.30 x 0.75 x 1.50m	60000
xiii	Cotton, Ginger	1 x 1m	100000
xiv	Vegetable, Rose	0.75 x 0.75m	100000
xv	Strawberry	0.75 x 0.60 x 0.30m	100000
xvi	Other Flowers (Nishigandha, Gladioli and Chrysanthemum)	0.20 x 0.30 m	100000
xvii	Mulberry	1.5x0.9x0.6 m	60000

Sprinkler Irrigation System (for field crops like pulses and oilseeds)

Sr	Particulars	(Rs)
i	63 mm HDPE pipes	25000
ii	75 mm HDPE pipes	30000

FARM MECHANISATION

Sr	Activities	(Rs)
1	Tractor, Trailer, Reaper, Combined Harvestor, other farm implements	As per quotations
2	Conventional carts	
a	Capacity 5 qtl.	16000
b	Capacity 8 qtl.	20000
3	MAIDC tyre carts	
a	Capacity 2 T	26620
b	Capacity 3 T	28380
c	Locally fabricated	21780
4	MAIDC Steel carts	
a	1 MT	36300
b	2 MT	37400
c	3 MT	38500
d	Locally fabricated 3.5 MT	40700

PLANTATION AND HORTICULTURE

Sr	Crops	(Rs / Ha.)
1	Mango	145550
2	Grapes	1054000
3	Pomegranate	205188
4	Mandarin orange	176218
5	Sweet orange	160705
6	Acid lime	167438
7	Aonla	78886
8	Sapota	128603
9	Custard apple	114300
10	Cashew nut	93829
11	Fig	158470
12	Bamboo plantation	30000

Banks in Konkan area may need to consider suitable / needbased revision in unit cost wherever necessary.

SHADENET FOR FLOWERS AND VEGETABLES

Sr	ACTIVITY	
1	10 R Shade net House	363100
2	20 R Shade net House	627400
3	40 R Shade net House	1128600

CULTIVATION OF FLOWERS AND VEGETABLES (Cost per 0.5 Ha)

1	Ist red / Dutch rose	575000
2	Carnation	645000
3	Gerbera	580000
4	Capsicum	520000

LAND DEVELOPMENT

Sr	Item of investment	Specifications	Rs
1	Graded bunding	0.95 Sq M cross section, 210 m length per ha	15700
2	Farm bunding		
i	upto 4% field slope light soil	0.80 Sq M c/s 200 m/ha	12800
ii	upto 4% field slope medium soil	1 Sq M c/s 200 m/ha	15600
iii	upto 4% field slope heavy soil	1.2 Sq M c/s 200 m/ha	18400
3	Field drainage for wet lands	2.52 Sq M cross section 65 m / ha	29600
4	Half dug out community tanks	M3-10000/ha 10	556000
i	Half dug out community tanks (m3 10000)	M3-8000/ha8	480000
ii	Half dug out community tanks (m3 10000)	M3-5000/ha5	339000
iii	Half dug out community tanks (m3 10000)	M3-2000/ha2	175000
iv	Half dug out community tanks (m3 10000)	M3-500/ha 0.5	65500
5	Land levelling & shaping/ha	(a) Slope : upto : 1%	7700
		(b) Slope : 1-2%	11700
		(c) Slope : 2-3%	15500
6	Fencing (running mts)	Barbed (1.8 mt.)	145

FISHERIES

Sr	ACTIVITIES	(Rs) / Ha.(WSA)
1	Composite Pond :New	206800
2	Composite pond : Renovation	176220
3	Scampi Monoculture	338000
4	Scampi Poly culture	317240
5	Shrimp Farming	448140

UNIT COST OF 2 CB COWS

Sr	Items	Unit specifications	Physical units	Unit Cost (Rs. / unit)	Total Cost (Rs.)
1	Cost of animals	No.	2	55000	110000
2	Insurance	No.	2	2750	5500
3	Conc. Feed (for first animal for 30 days)	Kg	135	17	2295
4	Misc. cost	Lump sum			2205
	Total cost				120000
	Margin money (15% of TFO)				18000
	Bank loan (85% of TFO)				102000

UNIT COST OF BUFFALOES

Sr	Items	Unit specifications	Physical units	Unit Cost (Rs. / unit)	Total Cost (Rs.)
1	Cost of animals	No.	2	63000	126000
2	Insurance	No.	2	3150	6300
3	Conc. Feed (for first animal for 30 days)	Kg	120	17	2040
4	Misc. cost				1660
	Total cost				136000
	Margin money (15% of TFO)				20400
	Bank loan (85% of TFO)				115600

Annexure II

Unit cost for Mango cultivation under Ultra High Density Farming

Variety	:	Kesar
Spacing	:	3m x 2m
Unit area	:	1 acre
No. of pts/ acre	:	666

Amt in Rs

		Particular	Unit	No/ Rate	1'st Year		2'nd Year		3'rd Year		4'th Year	
A]		INPUT MATERIALS			Qty	Amount	Qty	Amount	Qty	Amount		
1	Planting materials											
		Total Plants	Nos	40	666	26640						
		Gap Filling	Nos	40			70	2800				
2		Manures and Fertilisers										
	a	Organic Manure	MT	1000	3.3	3300	3.3	3300	6.66	6660	9.99	9990
	b	Fertilizers & Pesticides										
	i	N:P2O5:K2O	gm/pt		35:15:25	1123	45:25:50	1881	75:50:75	3298	120:75:100	4833
	ii	Micro nutrients	LS			250		500		1000		1000
	c	Pesticides/ fungicides	LS			1000		3000		13000		20000
		Subtotal - Input				32313		11481		23958		35823
B]		OPERATIONS										
	a	Land preparation (machinery)	acre	1000		1000						
	b	Pit digging, filling, planting	No.	45	666	29970		1500				
	c	Irrigation/ fertigation				3000		3000		3000		3000
	d	Application of chemicals	MD	250	2	500	5	1250	8	2000	8	2000
	e	Interculture/ Pruning/ training	MD	200	5	1000	10	2000	15	3000	15	3000
	f	Harvesting cost	MD	200					5	1000	5	1000
		Subtotal - Operations				35470		7750		9000		9000
C]		TOTAL EXPENSES PER ACRE				67783		19231		32958		44823
		UNIT COST - Capitalised for 3 years				119972	Rounded off to Rs 1,20,000/-					

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
D]	Capital Invesment									
		MI System	30000							
		Orchard	67783	19231	32958					
		Total	97783	19231	32958					
E]	Maintenance expenses					44823	49306	54236	59660	65626
F]	TOTAL EXPENSES		97783	19231	32958	44823	49306	54236	59660	65626
	(10% increase considered from 5th year onwards)									
G]	Income									
		Yield (MT/Acre)	0.0	0.0	3.0	4.0	5.0	6.0	6.0	6.0
		Income @ Rs 20 per Kg			60000	80000	100000	120000	120000	120000
		Net income from orchards			27042	35177	50694	65764	60340	54374

H]	Financial Analysis											
		Years ---------->	1	2	3	4	5	6	7	8	9	10
		Cost	97783	19231	32958	44823	49306	54236	59660	65626	72188	79407
		Benefit	0	0	60000	80000	100000	120000	120000	120000	120000	120000
		Net benefit	-97783	-19231	27042	35177	50694	65764	60340	54374	47812	40593
		IRR	26%									
		NPV of costs	278860									
		NPV of benefits	334903									
		Net Present Worth	56042									
		B C Ratio	1.20									

I]		Repayment schedule							
		Year	Loan disbursed	Loan o/s	Interest @ 10%	Repayment			
						Interest	Prin	Total	Net benefit
		1	61005	61005	6100	6100	0	6100	0
		2	17308	78313	7831	7831	0	7831	0
		3	29662	107975	10797	10797	0	10797	16245
		4	0	107975	10797	10797	10309	21106	14071
		5	0	97666	9767	9767	20650	30417	20278
		6	0	77016	7702	7702	31757	39458	26306
		7	0	45260	4526	4526	31678	36204	24136
		8	0	13581	1358	1358	13581	14940	39435

Assumptions

Rate of Interest at 10%; Loan at 90% of the proposed UC

60% of net income reckoned towards payment of interest and repayment of principle

Repayment in 8 years with 3 years moratorium for principle

Expenses - 10% increase considered from year 5 onwards

Income - kept on a conservative basis; no increase considered over the years in price of Mango.

Annexure III

Unit cost for Pomegranate cultivation under Ultra High Density Farming

Variety	:	Bhagwa
Spacing	:	3m x 2m
Unit area	:	1 acre
No. of pts/ acre	:	666

(Amt Rs)

		Particular	Unit	No/ Rate	1st Year		2nd Year		3rd Year		4th Year	
A		INPUT MATERIALS			Qty	Amount	Qty	Amount	Qty	Amount		
1		Planting materials										
		Total Plants	Nos	30	666	19,980						
		Gap Filling	Nos	30			70	2,100				
2		Manures and Fertilisers										
	a	Organic Manure	MT	1000	3.33	3,330	6.66	6,660	9.99	9,990	9.99	9,990
	b	Fertilizers & Pesticides										
	i	N:P2O5:K2O	gm / pt		100:100:100	4,923	200:150:150	7,782	250:175:175	9,211	300:200:225	10,986
	c	Pesticides/ fungicides/ micronutirents	LS			5,000		11,000		18,000		24,000
		Subtotal - Input				33,233		27,542		37,201		44,976
B		OPERATIONS										
	a	Land preparation (machinery)	acre	1000		1,000						
	b	Pit digging, filling, planting	No.	45	666	29,970		1,500				
	c	Irrigation/ fertigation				3,000		3,000		3,000		3,000
	d	Application of chemicals	Man Days	250	2	500	5	1,250	8	2,000	8	2,000
	e	Interculture/ Pruning/ training	Man Days	200	5	1,000	10	2,000	15	3,000	15	3,000
	f	Harvesting cost	Man Days	200					5	1,000	5	1,000
		Subtotal - Operations				35,470		7,750		9,000		9,000
C		TOTAL EXPENSES PER ACRE				68,703		35,292		46,201		53,976
		UNIT COST - Capitalised for 3 years				1,50,195	Rounded off to Rs 1,50,000/-					

			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8		
D	l Invesment											
		MI System	30000									
		Orchard	68,703	35,292	46,201							
		Total	98,703	35,292	46,201							
E	ance expenses					53,976	59,373	65,311	71,842	79,026		
F		TOTAL EXPENSES	98,703	35,292	46,201	53,976	59,373	65,311	71,842	79,026		
considered from 5th year onwards)												
G		INCOME										
		Yield (MT/Acre)	0	0	2	4	6	6.5	6.5	6.5		
		Income @ Rs 23 per Kg			46,000	92,000	1,38,000	1,49,500	1,49,500	1,49,500		
		Net income from orchard			-201	38,024	78,627	84,189	77,658	70,474		
					2000	4000	6000	6500	6500	6500		
H		Financial Analysis			3.003003003	6.00600601	9.009009009	9.75976	9.75975976	9.75976		
		Years ---------->	1	2	3	4	5	6	7	8	9	10
		Cost	98703	35292	46201	53976	59373	65311	71842	79026	86929	95621
		Benefit	0	0	46,000	92,000	1,38,000	1,49,500	149500	149500	149500	149500
		Net benefit	-98703	-35292	-201	38024	78627	84189	77658	70474	62571	53879
		IRR	26%									
		NPV of costs	332696									
		NPV of benefits	400616									
		Net Present Worth	67920									
		B C Ratio	1.2									

I		Repayment schedule							
		Year	Loan disbursed	Loan o/s	Interest @ 10%	Repayment			
						Interest	Prin	Total	Net benefit
		1	61832	61832	6183	6183	0	6183	0
		2	31762	93595	9359	9359	0	9359	0
		3	41581	135176	13518	13518	0	13518	0
		4	0	135176	13518	13518	9297	22814	15210
		5	0	125879	12588	12588	34588	47176	31451
		6	0	91291	9129	9129	41384	50514	33676
		7	0	49906	4991	4991	49906	46595	31063

Assumptions

Rate of Interest at 10%; Loan at 90% of the proposed UC

60% of net income reckoned towards payment of interest and repayment of principle

Repayment in 7 years with 3 years moratorium for principle

Expenses - 10% increase considered from year 5 onwards

Income - kept on a conservative basis; no increase considered over the years in price of Pomegranate