# SELECTIONS FROM THE RECORDS OF THE BOMBAY GOVERNMENT. 

No. CCXIV-Neiv. Seritg.
$\qquad$ .

PAPERS<br>, relating fo the

# REVISION SURVEY SETTLEMENT ÓF 123 VILLAĞES 

of tee

$\therefore$ DASKROI TÁLUKA<br>Qf the

## AHMEDABAD COLLLECTORATE.

要かmbay:
printed at the government central press.
1889.

## INDEX TO THE CORRESPONDENCE. RELATING TO THE REVISION SURVEY SETTLEMENT OF 123 VILLAGES OF THE DASKROI TALUKA OF THE AHMEDABAD COLLECTORA'TE.



APPENDIX A.
Statistioal Tabli No. IIL
(To be made out bepore Sextlimaze.)
Details of Cultivation


APPENDIX $B$.
-Statigtioal Table No. IV.
(To be made out ehevorb Setthbment.)
Detail of Population for the year 1887-88.

| Taluka. | Caste, | Matiss. |  | Total Malea | Finalis. |  | Total Females. | Totel of 5 and 8. | Cax Rrad. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Under <br> 15 yenri of atg. | Above 15 yeara ot age. |  | Under 10 year of asfe. | Above 18 years of ago. |  |  | Malen. |  | Pernsea |  |
|  |  |  |  |  |  |  |  |  | Num. ber. | Per Cent | $\underset{\substack{\text { Num- } \\ \text { berr, }}}{ }$ | $\underset{\substack{\text { Per } \\ \text { Cont }}}{ }$ |
| 1 | 2 | 8 | 4 | 6 | 6 | 7 | 8 | 9 | 10 | 11 | 18 | 18 |
|  |  | $\begin{gathered} 28,314 \\ 868 \\ 10 \\ 119 \end{gathered}$ | $\begin{array}{r} 41,042 \\ 1,484 \\ 82 \\ 161 \end{array}$ | $\begin{array}{r} 64.856 \\ 2,179 \\ 41 \\ 270 \end{array}$ | $\begin{array}{r} 18,447 \\ \mathbf{5 6 9} 7 \\ 81 \\ 81 \end{array}$ | $\begin{array}{r} 88,947 \\ 1,939 \\ 17 \\ 111 \end{array}$ | $\begin{array}{r} 57,89 \\ 1,056 \\ 24 \\ 192 \\ 192 \end{array}$ | $\begin{array}{r} 121,750 \\ 4,187 \\ 686 \\ 668 \\ 46 \end{array}$ | $\begin{gathered} 6,771 \\ 149 \\ 31 \\ 126 \end{gathered}$ | $\begin{gathered} 304 \\ 64 \\ 764 \\ 80 \end{gathered}$ | $\begin{gathered} 174 \\ 5 \\ 12 \end{gathered}$ | $\begin{gathered} \frac{1}{6} \\ 600 \\ 874 \end{gathered}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 24,181 | 4,708 | 66,889 | 19,098 | 40,467 | 80,685 | 128,404 | 7,088 | 101 | 283 | 1 |

APPENDIX C.
Etatistioas Table No. $\nabla$.
(To bs mads out beforb Setrliencint.)
Occupations of the People,":

| District. | Surveyed Villages. | - Occupa |  | 'Number, |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 |  | 4 |
| Daskroi Taluka of the Ahmedabad Collectorate, | 123 | Agricultural <br> Non-Agricaltaral | ... $\quad$... | $\begin{array}{r} 58,307 \\ \mathbf{6 8 , 0 9 7} \end{array}$ |
|  |  |  | Total . | 126,404 |

Deputy Superintendent, Revenue Survey, Gujarât.
Camp Viramgám, 20th February 1889.

## APPENDIX D

## Statistical Table No. VI.

## (To be made out before Stitheyent.)

Return of Houses, Chivdis, Wells, \&c., and of Live and Dead Stock.


The upper line indicates the figures of the previous Settlement.

## 'APPENDIX $\mathbf{E}$

Statement of Schools, with their average attendance, for the year 1886-S7, in the Villayes of the Daskroi Taluka.


APPENDIX F.
Statement showing the Number of Survey Numbers cultivated entively by the Holders in whose names they are entered in the Village Accounts,

| Surveyed Villages. | Number of Survey Numbers cultivated entirely by the Holdera in whose namca they are eatered in the Village Aocounte. | Number of Survey Numbers not cultivated entirely by the holdera in whose names they are enterea, but partnerthip with other. | Number of Survey Numbers sublet for Money Payments. | $\begin{gathered} \text { Namber of } \\ \text { Survey Numbers } \\ \text { Bublet for Grain } \\ \text { Paymenta. } \end{gathered}$ | $\begin{gathered} \text { Number of } \\ \text { Survey Numbers } \\ \text { waste. } \end{gathered}$ | Grand Total. | Romarka. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 23 villages of the Daskroi Táluka of the Ahmedabad Collectorate. | 53,440 | $\stackrel{\checkmark}{2,222}$ | 2,127 | 573 | 4,870 | 63,232 |  |

T. R. FERNANDEZ,

- Deputy Superintendent, Revenue Survey, Gujarát.


## APPENDIX G.

Statenient of Sales of Land in Villages of the Daskroi Táluka, Ahmedabad Oollectorate, taken from the Records of the Sub-Registrar's Office from 1884-85 to 1886-87.


## APPENDIX H.

Statement showing Subletings in the Villages of the Daskroi Taluka of the Ahmedabad Collectorate taken from the Records of the Sub-Registrar's Office from 1884-85 to 1886-87.

T. R. FERNANDEZ,

Deputy Superintendent, Revenue Survey, Gajarat. .

## APPENDIX I.

Statement showing Mortyage Transactions in the Villages of the Daskroi Taluka of the Ahmedabad Collectorate 'taken from the Records of the Sub-Registrar's Office from 1884-85 to 1856-87.


## APPENDIX J.

Statement showing the Prices prevalent in the Daskroi Taluka of the Ahmedabad Collectorate for 33 years, fron 1854-55 to 1887-88.

'I. R. FERNANDEZ,
Deputy Superintendent, Revenue Survey, Gujarat.

APPENDIX K
Revenue History of Fillages situated in the Daskroi Taluka of the Ahmedabad Collectorate in which the Survay Settlement was introduced in the year $1860-61$.

| Tembs. |  |  |  |  |  |  | Usocethitb Agessmo Apazu <br>  |  |  |  |  |  | Topal Lamp, Gormaxybit Gccurind, Cxoccuring, Asd líy. |  |  | Belancenutandingut the closenof the jear. | Hemarks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | OcompiedAcrea. | Font Standard Assesament. | Bernisporas. |  |  | $\underset{\substack{\text { Balance } \\ \text { colleeted }}}{ }$ | Aereas. | Pull | Realizations from auction sane of grazing. | Acrees | Full StandardAsecessment | Collections, | $\begin{aligned} & \text { Total of } \\ & \text { Columnn } \mathbf{2 ,} \\ & 8, \text { and } \mathrm{an} . \end{aligned}$ | Trital Arsest ment. Total of Columins 8, $\theta$, and 12. | Collectionas. Total of Columns 7 , and 33. |  |  |
|  |  |  | Permanent. | Caspard. | Tomal. |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 8 | 6 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 18 | 18 | 24 | 15 | 10 | 17 | 18 |
|  | A. g. | Re. A. |  | Ha $2 . \mathrm{p}$. | a. $p$ | a. p. | A. g. | Re. An |  | A. R. |  | a P. | A. 8. | Rs. e. p. | Re. an. p. | Ras. an. p. |  |
| ${ }_{\substack{2 \\ 8855-56 \\ 8850-57}}$ | A1,732 68 68.42688 |  |  |  |  | 2,25.157 11 | $\begin{aligned} & 50,1691313 \\ & 40,12 \geq 17 \end{aligned}$ | (1) | 2, | $\begin{array}{r} 52,058 \\ 53,010 \\ 50 \end{array}$ | $\begin{array}{lll} 2,28,025 & 11 & 8 \\ 2,31,739 & 0 & 7 \end{array}$ | 31,783 310 | 164,879 164,959 10 |  | $\begin{array}{lll} 2,59,076 & 1 & 10 \\ , 8,59,2661 & 15 & 4 \\ 0,58 \end{array}$ | $\ldots$ |  |
| ${ }_{\substack{1857.48 \\ 156 \times 59}}$ | ${ }_{70,133}^{62,23} 8$ |  | 873 <br> 49 <br> 49 <br> 10 | $\begin{array}{r}83 \\ 8,175 \\ \hline 9\end{array}$ | 626 <br> 88 <br> 8,525 <br> 8 |  | +4.753 48.38 | $\begin{array}{llll}91,263 & 8 & 1 \\ 75,811 & 8 & 1\end{array}$ | 2,400 10 | 58,000 54,14 |  | $\begin{array}{llll}81,64 & 0 & 0 \\ 32,368 & 8 & 8\end{array}$ | 164,489 170,585 30 | $5,43,988$   <br> $4,78,043$   <br> 15 8 7 |  |  |  |
| 1850.00 | 72,074 16 | 2,29, $2 \times 1014$ | 4497 | 1561210 | 008 | 2,28,684 | 41,243 i | 63,621 | 2,341 | 64,087 | 1,88,04812 12 | 8,116 14 | 187,504 27 | 4,82,809 | 2,66,042 14.6 |  |  |
| Total | 829,008 36 | 11,13,803 14 | 1,698 8 | 4,007 232 | 6,706 5 | 11,08,097 810 | 236,783 | 4,00,662 13 | 0,710 | 267,160 | 10,71,026 14 | 1,62,887 1 | 882,809 87 | 25,94,483 10 | 12,81,694 11 |  |  |
| Average | 65,001 15 | 2,22,760 126 | 83911 | 6019 | 1,141 4 | 2,21,019 9 | 47,846 - | 81.93291 | 2,142 | 68,488 37 | 2,14,205 0 | 82,577 6 | I 66,58187 | 5,18,888 11 | 2,56,888 150 | ..... |  |
| 1880.61 | ,45184 | 2,41,597 | 1,164 4 | 17,230 0 a 4 | 18,304 4 | 2,28,203 4 | 29,569 9 | 68,365 | 2,639 10 | 54,995 18 | 1,69,882 | 83,893 14 | 168.01621 | 4.78,924 16 | 2,5 |  |  |
| 188162 ... | 98, 91212 | 2,66, $\times 878$ |  | 6,510 010 | ${ }^{8,170} 1$ | $\begin{array}{ll}2,58,216 & 16 \\ 2,74 \\ 2,805 \\ 8 & 71\end{array}$ |  | 96,975 ${ }^{46} 8$ | ${ }_{8}^{4,140}{ }^{4} 5814$ | 年, 83.4 | 1,71,43013 ${ }^{1}$ | 84,069 <br> 32.181 <br> 12 | 188,660 10 | ${ }^{4,84,743} 4$ | ${ }^{2,964,427}$ |  |  |
|  |  |  | (1,629 ${ }^{1,683} 129$ | 14,294 1017 | 1,688 16,807 14 |  | 15,850 <br> 18,720 <br> 84 | - 88.2838 | a, <br> 6,5888 <br> 6,56 | 56,105 <br> 56,194 <br> 13 | 1,71,018 $1,74,367$ 12 12 | ${ }_{37}^{32,981}$ | 167,49939 ${ }^{188}$ | ${ }^{4,940,411}$ |  |  |  |
| 188405 | 99,64 5 T4 | 2,97,355 1 | 1,3848 2 | -94818 | 1,4831011 | $2,85.841$ | ${ }^{13.076} 25$ | 40.746 14 | ${ }^{7.969} 10$ | 5i, 53135 | 1,74.218 10 | ${ }_{50,776}^{50,88}$ | 187, 21818 | $5,12,280810$ | 8,5, 3,86715 |  |  |
| ${ }^{186566}$ | 111,4:8888888 | 2,98,317 <br> 3,07272 | 1, 1,448 | \% 25.148 | (1,270 |  | 15,217 <br> 13,158 <br> 18 | 4,104 38,542 380 | 8,074 <br> 7,544 <br> 10 | ${ }^{54,525} 515$ | $1,75,388$ $1,73.381$ 14 |  | ${ }^{1717,2122}{ }^{\text {a }}$ |  |  | ...... |  |
| ${ }_{186788}^{18867}$ |  | $\begin{array}{lll}3,07,272 & 1 & 8 \\ 8,01,608 & 1 & 2\end{array}$ | ${ }_{2}^{2,004} 8$ | 8,117 8082 | ${ }_{8}^{8,1798}$ |  | ${ }_{1} 12.61416$ | S0, | 9,001 11 | ${ }_{59,7 \times 2} 5172$ | ${ }_{1}^{1,69,035}$ | 51,520 5 | 167, 30317 | $5,6 \pi, 200810$ | $8,60,23618{ }^{18} 8$ |  |  |
|  | 192,688 <br> $101 ; 87$ <br> 108 <br> 18 |  | $\begin{array}{llll}1,911 \\ 1,912 & 7 & 7 \\ 1\end{array}$ | 1,880 707810 78 |  | [10, | 11,490 <br> 11,568 <br> 18 | 32,460 20,825 8 |  |  | 1,888436 $1,05,412$ 16 | 50,906 50,94 48 | 167,425 107,488 26 |  |  | …... |  |
| 1889.70 | 101,8781 | 2,99,356 97 | 1,912 7 | 7078 | 2,618 1010 | 2,96.736 148 | 11,5.56 | 20,620 | 6,020 | 3, |  |  |  |  |  |  |  |
| Total | 980,149 11 | 28,93,201 8 6 | 16,608 15 | 48,907 71 | 60,574 в 10 | 28,32,628 127 | 166,192 26 | 4,09,032 9 | 61,830 | 544,140 | 17,15,618 0 | 4,52,988 | 1,680,482 | 50,17,851 ${ }^{13} 10$ | 33,47,456 8 |  |  |
| Average | צ8,014 $3 i$ | 2,80,320 111 | 1,660 11. 2 | 4.3981111 | 6,057 71 | 2,88,262 1010 | 15, 1 , 1,10 | 40,003 | 0,183 | 56,314 | 1,71,501 1210 | 45,240 13 | 168,048 11 | 3,01,786 80 | 8,44,745 8 |  |  |
| 1870.71 ... | 102,410 24 | 3,95,568 ${ }^{7}$ | 1,871 77 | 80019 | 2,172 60 | 2,98,886 | ${ }^{11,161} 13$ | ${ }^{24} 20888$ | 8,837 18 | 58.74 | 1,88.279 ${ }^{6}$ | ${ }^{50,786810} 10$ | 187,819 18 | 4,88,640 | 3,81,100 10 |  |  |
| 1881.78 | 10:, 15811 |  | ${ }_{1.742}^{1.636} 15$ |  |  | $2,93,075$  <br> 2889  <br> 2884 8 |  | 28,143 28.030 18 | 7,777 9,809 | 53,575 53,834 24 |  | S0,745 11111 |  | 4, 4,4040111 | (\%,51,099 10 |  |  |
| $\begin{array}{ll}1887278 \\ 187474 \\ & \ldots . .\end{array}$ | $\stackrel{\|c\| c}{101,111} 17$ |  | ${ }_{1}^{1,692} 15$ | ${ }^{1,122} \times 1080$ | 2,385 <br> 2.234 <br> 8 <br> 1 | $2,89,384$ 8 <br> 2,11888  | (12,642 8 | 27.122 | 7 | ${ }_{65,853} \mathbf{3 5}$ | li,71.488 11.0 | ${ }_{30}^{50,263} 12$ | 16i, 24.83 | 4, | $8,49,69)$ 12 <br> $8,40,000$  <br> 4 5 |  |  |
| ${ }_{1874} 1876$ | 95.76585 | ${ }_{2}^{2,77,805} 113$ | 1,720 15 | ${ }_{1227}^{227} 10$ | ${ }_{1}^{1,248}$ | 2,75,857 ${ }^{2}$ | 17,457 36 | $38,3,3,6$ 38,616 | ${ }_{7}^{7,9002} 11$ |  | ${ }_{1} 1,71,282311$ | ( $50,113 \mathrm{~S}$ | 167,461 <br> 16,646 <br> 1 |  |  | ${ }_{94} 148$ |  |
| 1875.76 1876.77 | 90.681 ${ }^{95}$ |  |  | 12,923 1,2088 18 | 14,019 <br> 2,847 <br> 8 | [ | (15,795 | 38,616 <br> 82,71 <br> 1 | ${ }^{5,945}$ | ${ }^{5} 5 \times 8.89987$ | i,69,509 18 18 | ${ }_{49,560}$ | 181,419 31 | ${ }^{4} 188,186748$ |  | .... |  |
| $\xrightarrow{188778}$ | ${ }_{97617}^{9514} 8$ | $2.79,+20140$ | 1,1868 | 1,2018 | - | 2,78,084 4 | $12,606.14$ | 28,7875 | 4,488 ${ }^{18}$ |  | i, 1,6959585 | 4046683 49653 | 164,2016 164,071 | 4.75 | ${ }_{\text {3,72, }}$ | $\ldots$ |  |
| 1878.79 1870.60 | 100, 367 ${ }^{101,74} 27$ |  | 1,152 710 |  |  |  | 9,745 14 | 19,815 17,00312 | 3.711 4,2348 |  | 1,09,501 ${ }^{\mathbf{1}, 69,270} \mathbf{1} 115$ | 49,653 5 <br> 4,985  <br> 10 10 | 164,071 | 4. 44,880 <br> $4, i 4,564$ <br> 18 | $\begin{array}{llll} 8,37,656 & 6 \\ 8,41,040 & 5 & 81 \end{array}$ | $\stackrel{\text { …... }}{\text { - }}$ |  |
| Total | 888,938 7 | 23,47,4088 110 | 15,272 | 16,516 127 | 31,788 2 | 28,15,879 15 | 180,065 27 | 2,70,005 8 | 62,930 11 | 38,170 | 17,04,946 5 | b, 00,500 211 | 1,058,178 84 | 48,22,819 10 | 38,78,310 18 8 | 11011 |  |
| Avoruge | 98,898 38 | $2,84,78613 \quad 0$ | 1,527. 8 | 1,051 98 | 3,178 180 | 2,81,587 1611 | 18,006 23 | 27,000 | 8,908 1 | 58,017 | 1,70,494 10 2 | 50,050 0 | 165,817 15 | 4,82,261 15 5 | 8,37,931 1 | 111 |  |
|  |  | 2,86, 28114006 |  |  |  | 2,85,468 11110 |  | 18.470 | 4,312 12 | 53.882 18 | 1,68, 1288 | ${ }_{48,141}^{48,454} 18$. | ${ }_{164,123}^{168,761}$ | 4,73,881 0 | 9,89,286 5 |  |  |
| ${ }^{18}$ | - ${ }^{09,9005} 8$ |  | 658 <br> 420 <br> 48 <br> 12 | 43934 |  | li, | 10,286 10,614 22 | 20,20618 10,716 | 5,063 4.784 1 | 55,931 18.8 | ${ }_{1}^{1,686,818}$ | ${ }_{49}^{48,399} \times$ | 164,123 ${ }^{86}$ | ${ }_{4}^{4,78,81818} 414$ | 3, $3,88,174{ }^{3}$ | ...... |  |
| ${ }_{1}^{1 \times 8 \times 2-88}$ | 99,189 <br> 98,855 <br> 8 | $2,4,00514$ <br> $2,83,315$ <br> 14 | $40412{ }^{412}$ |  | - 831 | 2,8,7,78 | 10,820 22 | 120.758 <br>  <br> 1 | ${ }_{6} \mathbf{6}, 7308$ | ${ }_{68,84} 814$ | ${ }^{1,68,924} 18$ | 49.355 | 168,568 36 | 4, 2 2,548 12 | ${ }_{8,37,500}^{8,8}$ | -...... |  |
| 1884.65 |  |  | ${ }^{464} 12{ }^{12} 8$ | 545 | ${ }^{1,009} 12811$ | 8,83,132 ${ }^{1} 11$ | 10,398 | 18.705 ${ }^{18}$ | ${ }_{\text {8,094 }}^{8,788}$ |  |  | ${ }_{49,381}^{49,31}$ | 268,647 24 | ${ }_{\text {4,72, }}^{4,751} 4$ | $3,83,608$ <br> $8,38,328$ | ... |  |
| $\underset{\substack{1889.56 \\ 1846-67}}{ }$ |  | $2,85,174$ 10 <br> $8,85,14$ 14 <br> 18  |  | 685 <br> 685 <br> 18 | 1,026 <br> 1,023 <br> 1,02 | $\begin{array}{lll} 2,81,147 & 12 & 9 \\ 2,84,127 & 10 & 7 \end{array}$ | $\begin{aligned} & 9,567 \\ & 9,848 \\ & 9, \end{aligned}$ | ${ }^{18,720}$ | 4,760 9 | 53,606 28 | 1,68,600 10 | ${ }_{69,374} 9$ | 169, 20718 | ${ }_{4}^{4,72,479}$ | $8,38,382$ 3,88 | .... |  |
| Totas | 0:7,362 97 | 19,93,098 140 | 8,661 12 | 2,880 3 | 6,991 16 | 10,87,30, 14 | 7,122 10 | 1,35,841 11 | 35,523 | 376.891 8 | 11,80,011 | 3,44,517 6 | 1,146,378 | 88,09,550 | 28,67,345 18 |  |  |
| Avenge | 09,623 10 | 2,84,818 13 B | 13 | 404 | 9182 | 2,83,900 112 | 10,160 13 | 19,405 16 | 5,074 12 | 58,841 | 1,88,573 | 40,216 18 | 163,625 . | 4,72,i02 14 | 3,88,192 |  |  |

## APPENDIX L.

General Statement referred to in paragraph 61 of the Deputy Superintendent's Report No. 180, dated SOth February 1889, for 123 Government Villages situated in the Daskroi Taluka of the dhnedabad Collectorate.


APPENDIX L-continued.



APPENDIX $\mathrm{I}_{1}$ continued.



APPENDIX L-continued.


APPENDIX L-continued.


A PPENDIX L-concluded.


No. 731 A or 1860.

## From

> S. MANSFIELD, EsQuIRE,
> Revenue Commissioner, N. D.

To
A. ROGERS, EsQUIRE; Officiating Settlement Officer.

Revenue Commissioner's Ofice, Camp Bombay, 2nd April 1860.
Sir,
I have the honour to request you will be good enough to inform me whether there is any likelihood of the assessment of the Daskroi Pargana being revised this season: if not', what obstacles there are in the way of its being so.

> I have, \&a.
> S. MANSFIELD, Revenue Commissioner, N. D.

No. 88 or 1860.
From
Captain C. J. PRESCOTt,
Superintendent, Rêvenue Survey and Assessment, Gujarạt;
To
S. MANSFIELD, Esquirs,

- Revenue Commissioner, N. D.

Superintendent's Office, Camp Kuba, 1sth April 1860.
Sir,
In reply to your letter (to the late Settlement Officer in this province) No. 731A of the 2nd current, I have the honour to state that it will be impossible to introduce the revised rates in the Daskroi Pargana this season.
2. In the group of villages surrounding the city of Ahmedabad the classification is, in many villages, too low, and in other portions of the pargana, where the field classification is correct, the anna value of the scale employed must be raised considerably before it can be fairly applied to the calculation of revised rates suitable to a district having so many local advantages.
3. With only a small establishment at my disposal for this duty, '(which is now fully employed in writing up registers and correcting the classification of Jetalpur, there being no other qualified kárkúns available), it is impossible that the large amount of writing, calculation, and correction of books which this revision will entail can be accomplished in time to make the new settlement before the rains, but I trust that every thing will be ready for the introduction of the revised rates early next season.
4. Should a more detailed statement of the causes which have prevented the possibility of introducing the revised rates in Daskroi this season be considered necessary, I will take an early opportunity of reporting further thereon.

## I have, \&c.,

C. J. PRESCOTT,

Superintendent, Revenue Survey and Assessment, Gujarát.

No 917 or 1860.

## Frou

- S. MANSFIELD, Esquirr,

Revenue Commissioner, N. D.;
.To

Captan C. J. PRESCOTT, Superintendent of Survey, Gujarát.

Reveniue Commissioner's Office, Camp Mátherán, 23rd April 1860.

## Sir,

With reference to the 4th paragraph of your letter No. 82, dated 13th instant, I shall feel obliged by your forwarding a detailed explanation of the reasons which will prevent the introduction, in the current year, of the revised rates into the Daskroi Pargana. You will be so good as to report the names of the officers through whose neglect and carelessness the classification requires to be done over again, and also the loss incurred to Government in the re-classification,

I have, \&c.
S. MANSFIELD, Revenue Commissioner, N. D.


No. 187 or 1860.

## From

> Captain C. J. PRESCOTT, Superintendent, Revenue Survey, Gujarát;

To
S. MANSFIELD, Esqutre,

Revenue Commissioner, N. D,
Camp Pirána, sth May 1860.
Sir,
In obedience to instructions contained in your letter No. 917 of the 23 rd ultimo, I have the honour to forward a detailed statement of the reasons which prevent the possibility of introducing the revised rates in Daskroi during the current season.
2. I will enumerate the reasons separately, and give an explanation of each. The new rabes cannot be introduced this season-

1st_-Because the classification of some of the villages was proportionately too low.
In the group of villages near Ahmedabad the Settlement Officer dissovered the most uneven classification, the averages in some being 13 annas and in others adjoining 9 or 10, and this without any apparent or sufficient reason. These villages were classified under the superintendence of Mr. Rae, who does not appear to have had a very clear conception of his duties, and certainly did not supervise either his men or his work in a pleasant or business-like manner.

2nd.- Because it was considered necessary that detached portions of different villages in the immediate neighbourhood of Ahmedabad should be brought within the limits of one boundary, and be re-mapped and re-classed.

I need not observe that all this ought to have been done when the diturict was under measurement, which it was not: hence the necessity for doing it at the eleventh hour.

| 1. Chiloda. | 4. Odhav. |
| :--- | :--- |
| 2. |  |
| 2. Limbdia. | 5. $\begin{array}{l}\text { Pardhol. } \\ \text { 3. }\end{array}$ Singarva. |
| 6. Enásan. |  |

sind.-Because the bagait takhtas of the villages noted in the margin were lost in the Post Office, in transit from the Survey Assistant, who prepared them, to the Settlement Officer.

The Post Office in explanation of this have informed me that the Bhangy Dák containing these packets was robbed between Ahmedabad and Dholka on the 24th November last.

4th.-Because the bagaít takhtas of 22 villages were not forwarded from the Survey Assistant, who prepared them, to the Settlement Officer in time for the rates to be calculated this season.

Mr. Bulkley and Mr. Beyts prepared these statements, and at the request of the latter officer I subjoin the explanation which he has given in accounting for this delay.

I now come to by far the most important reason :-
bth.-Because in the opinion of the Settlement Officer and myself the classification of rice lands under wells is too low in comparison of that of land under tanks, the water of which is frequently raised by labour for a first crop, and never suffices for a second.
3. I should have to enter into a very long and detailed discussion to put clearly before you the reasons which have led us to-arrive at this conclusion, but I will endeavour to give, in a words, my reasons for thinking that the whole plan of rice measurement and classification in this province is wrong in principle, and in practice is almost, if not quite, unworkable.
4. First, I must call your attention to the plan of measurement which in itself is sufficient to prevent the possibility of fair and even classification, besides entailing on the classers the necessity for making alterations and corrections in the maps and field books.
5. The plan now obtaining is to measure and to include in one survey the holdings of several cultivators -without defining the limits of their holdings, notwithstanding that the respective occupiers may have different water rights and privileges.
6. Now, a plan which works well in jiraít country is utterly inapplicable in a rice-growing country; for it will be apparent that although there is no difficulty in classing a jirait field and applying fairly the average class value in working out the portion of revenue due by each ocupant, the rights of each of whom are identical, yet that it is impossible to do it at all, much more to do it fairly when the rights of the different occupiers are severally unequal.
7. Nothing but confusion, injustice, and ultimately loss of revenue can be the result of such a plan, and yet it is the plan of this survey and has been carried out in both Jetalpur and Daskroi, but certainly not with the approval of the Settlement Officer.
8. I give' an example. Hère is a'field of 1 acre and 15 gunthás, having 3 occupants-A, B and C-whosé respective shares have not.
 been defined at the time of measurement. Now it happens that A has a right to water from a sweet well in another field, from which he brings water to his share, but to which $B$ and $C$ have no right.
9. The classer comes, and instead of entering in his book that A only of the 3 occupants has a right to the water, he enters that the field has a right
to the water, or that the occupants generally have a right to the water, and classes it thus-

instead of thus-
No. 2.

10. After this the (hissávar mápni) meastrement' of shares takes place when it is discovered that the shares are as under, namely :-

Highest water clas- As. sification ... 24
Highest soil class... 16 thus:-
11. But it is too fate now to rectify the classification: so the rates instead of being calculated


| R. a p. $\begin{array}{r}\text { are calculated thus :- } \\ \text { Re. a. p. }\end{array}$ |
| :--- | :--- |

Rs. a p. $\begin{array}{r}\text {. are calculated thus :- } \\ \text { Re. a. p. }\end{array}$
A 20 gunthas soil and

A. g. a.

12. Now the effect of this is that the assessment of the field is increased 35 per cent. above its real value, and that B pays 68 per cent. and C pays 68 per cent. in excess of the just claipn Government have upon them, and this solely because the work is done on wrong principles.
13. It has been argued that the classers might (under the present plan) class rice holdings by showing each holding as a share in the sketch of the feld in their field books, and classing each share on its merits, notwithstanding that they had not previously been measured separately.

I need scarcely say that this could not be done without previous measurement, for it also would entail the same inaccuracy in another form. Instead of the classification bhág annas being, soil and water inclusive, 23 annas as shown in the above diagram No. 1, they would be, soil and water inclusive $(23+13+13$ $\div 3$, giving a mean of ), 16 annas and 4 pies, and when divided and worked out would make an equally unjust distribution of revenue. $B$ and $C$ would still pay more than their proper share and, in this case, A a great deal less, because the rates would be calculated on the average value of the survey number ( 16 annas and 4 pies, soil and water inclusive) and not pôt $\cdot n u m b e r w a r$ as I recommend, so that although the classer might have made his sketch of shares with a due regard to the several holdings, yet, practically, this precaution would not affect the calculations of the revenue.
14. Without entering into the question whether it is anywhere advisable to class the water under wells in preference to considering it bágait, and assessing it accordingly, I will allude to some of the difficulties we meet with in framing a good and workable scale for this description of classification.
15. That it can be done after a fashion I think $I$ can prove, but that it can ever be well done I have very grave doubts.

16: The fault of the present system of classification of rice under wells is this. No proper data has yet been collected to show the average proportion a second crop bears to first, and the consequence is great unevenness of classifica. tion and much injustice to individuals.
17. For it will be apparent to you that if 12 acres of rice are assisted from one sweet well and 7 acres only from another, both wells having an equal supply of water, that the 7 acres have a great advantage over the 12 , in consideration of the difference of stratum of water that the latter well can put upon the land under it, and thus ensure superior crops.
18. But no allowances appear to have been made in calculating a scale for making the classification, as I will now show.
19. Assuming 16 annas as the value of the water class which would be put upon bond-fide one-crop land, and 20 annas as that which could be put on if two crops are produced, it is clear that it is necessary to ascertain (supposing there are 10 acres under a well) what proportion the second crop bears to the first; that is, what is the usual rotation and what the extent.
20. This, under the present system, is not ascertained, not even approximately, and the consequence is, the work is haphazard ; the classer may class the whole of the fields under the well at 16 annas, or at 20 , according to the information furnished him.
21. I see, as I think, a remedy for this as follows:-

Assuming (to explain my plan) that a well will always seoure, in case of failure or paucity of rain, one crop of rice to 9 acres of land in average seasons, and that it will always allow of a rotation for second crop of one-third of that area in addition to any claims it may have upon it for the irrigation of any boná-fide bagait land, then the water classification of all fields coming under the well could, subject to modifications in certain cases, be fixed as follows :-
3 acres of double crop, at 20 annas
6 ditto of single crop, at 16 annas
9
and so on; the classification being increased or decreased in an equitable proportion according to the area really dependent on the well both for first and second crop.
22. The detail attending the complete working out of this, as regards sweet, brackish and salt wells, is too elaborate to trouble you with, buit I trust to make it work successfully in the revision of the classification of rice lands under wells in Daskroi.
23. But no really creditable work can be done under the present system. I could weary you with examples of its inefficiency, but need not do so, as, if I have made myself intelligible, you will understand the difficulties the Settle. ment Officer has had to encounter, and his reasons for declining to attempt a settlement of Daskroi this season.
24. Before commencing another season's work I trust to be able to lay before you a complete statement of the changes and alterations of system which

I would most respectfully recommend for your consideration, but I feel I have a great task before me requiring considerable attention, care and enquiry before it can be matured.

I have \&c.,<br>C. J. PRESCOTT, Captain,<br>Superintendent of Survey.

Note.-The explanation by Mr. Beyte, referred to in Clause 4 of paragraph 2, not necersary to be printed.

No. 194 oy 1860.
From $^{\text {F }}$

## Captain C. J. PRESCOTTT,

Superintendent, Revenue Survey and Assessment, Gujarát;
To
S. MANSFIELD, Esquire,

Revenue Commmissioner, N. D.

> Superintendent's Office, Camp Pirana, 11th May 1860.

Sir,
There is an error in the 11th paragraph of my letter No. 187 of the 8th current, which I shall be much obliged by your causing to be corrected.
2. The share of revenue therein shown as due respectively on the holdings of $A, B$, and $C$ are as follows :-

| $\frac{\text { A-20 gunthas }}{\text { B- }} 20 \text { g }$ | $\cdots$ | $\cdots$ | $\begin{array}{ccc} \hline \text { Rs. } & \text { as } & \text { p. } \\ 2 & 8 & 9 \\ 1 & 4 & 8 \\ 0 & 15 & 7 \end{array}$ | $\begin{aligned} & \text { A-20 gunthás } \\ & \text { B-20 " } \\ & \text { C-15 } \end{aligned}$ | $\cdots$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| C-15 " | $\cdots$ |  |  |  |  |  |  |  |  |  |
|  |  |  | 4131 | - |  |  |  |  | 0 | 7 |

They should be as follows :-

| A-20 gunthas | $\cdots$ |  | $\begin{array}{ccc} \hline \text { Rs. } & \text { a. } & \text { p. } \\ 3 & 1 & 6 \\ 1 & 13 & 6 \\ 1 & 6 & 2 \end{array}$ | $\frac{\mathrm{A}-20}{\mathrm{~B}-20} \text { gonthás }$ |  | $\ldots$ | $\cdots$ | $\begin{array}{lll}3 & 1 & 6 \\ 3 & 1 & 6 \\ 2 & 5 & 2\end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B-20 " |  |  |  |  |  |  |  |  |  |  |
| C-15 " | $\cdots$ |  |  | C-15 | \% | ... | ... |  |  |  |
|  |  |  |  |  |  |  |  | 8. | 8 | 2 |

This involves an alteration of the percentage shown in my 12th paragraph, which should be as follows :-

Increase on the field, 35 per cent.
On B's share of revenue, 68 per cent.
On C's share of revenue, 68 per cent.
Instead of 48, 98, and 98 respectively, as shown in my letter.
I beg to apologise for these errors, which occurred from the kárkúns having made a mistake in calculating the soil rate from the class entry on the plot.

I have, \&e.,
C. J. PRESCOTT,

Superintendent, Revenus Survey and Assessment, Gujarát.

No. 1471 of 1860.
From
S. MANSFIELD, Esqutrr,

Revenue Commissioner, $\dot{N}^{2} . \mathrm{D} . ; \cdot$
To
Captan C. J. PRESCOTT,
Superintendent, Revenue Survey and Assessment, Gujarát.
Poona, 7th July 1860.
Sir,
Before giving any opinion on the subject of your letter No. 187, dated 8th May 1860, I shall await the report promised in your'24th paragraph.

I have, \&c., S. MANSFIELD, Revenue Commissioner, N. D.

No. 193 or 1860.
From
Captain PRESCOT't,
Superintendent, Gujarát Revenue Survey;
To

## W. G. PEDDER, Esquire, <br> Assistant Settlemeñt Officer in Gujarát.

Camp Giramtha, 11th May 1860.
Sir,
I am under the impression that great changes must be made in the present system of bágát classification and assessment and in the classification of rice under wells, as, from what I have seen of its working and judging from the slow progress made in the settlement of this province, the conviction is forced upon me that there is something radically wrong in the principle on which it is worked. I, therefore, request that you will favour me with an opinion on the subject generally, and replies to the following queries:-

1. Do you see any objection to separating the assessment of land from that of wells?
2. If not, do you see any particular difficulty in doing so ?
3. In case we decide upon carrying out this plan, would you recommend the assessment on wells to be fixed entirely according to their capabilities as ascertained from an examination of village records showing the average area they have been in the habit of irrigating and the description of crops irrigated, or would you trust to the survey to discover the capabilities of each well by some process to be decided upon, or would you combine the two plans in such a way that one might check the other?
4. Are you of opinion that, in case of our separating the soil from the water, we shall hate to raise the classification (anna value) of soil under wells, or do you think it would be better to have a separate and independent rate altogether for jiraít and bagait soils?
5. Do you not think it advisable in rice-producing districts that all the rice lands under one well should be put in one revenue survey number, and then divided into $p 8 t$ (or subsidiary) numbers according to "vahivat"?
6. Do you not think it would be better (supposing we decide to separate the soil and water) to class all rice lands under wells according to their soil and rain water value only, leaving the difference of value on account of aid from wells to be allowed for in the well assessment?
7.     - Do you think the following form of well register would answer?

| Revence Survey <br> Number in which well is. | Deacription of water, number of kos, and pative name. | Names of Sharers. | $\left\|\begin{array}{c} \text { valno } \\ \text { of ofere. } \end{array}\right\|$ | Total assessment of well. | Ameomement of |
| :---: | :---: | :---: | :---: | :---: | :---: |
| North side141 | Ambá kua $\ldots$ <br> Sweet water $\ldots$ <br> Two kos $\ldots$ | Rámji   <br> Rowji $\ldots$ $\ldots$ <br> Ganna $\ldots$ $\ldots$ <br> Sakhu $\ldots$ $\ldots$ <br> Gopal $\ldots$ $\ldots$ <br>  Total .. |  |  | $\left\{\begin{array}{rrr} \mathrm{Ra} & \mathrm{a} & \mathrm{p} \\ 6 & 0 & 0 \\ 6 & 0 & 0 \\ 6 & 0 & 0 \\ 6 & 0 & 0 \\ 24 & 0 & 0 \end{array}\right.$ |
|  |  |  |  |  | 48 |
| South side | Dakin kna <br> Brackish water. <br> 1 kos | $\begin{array}{\|lll\|} \hline \text { Moti } & \cdots & \text {.. } \\ \text { Karim } & \cdots & \text {... } \\ \hline \end{array}$ |  | $\} 2200$ | $\left\{\begin{array}{lll}11 & 0 & 0 \\ 11 & 0 & 0\end{array}\right.$ |
| ${ }^{146}$ | Vánta kaa <br> Sweet water <br> One kos ... | $\text { \} Barkhali. }$ |  |  |  |

8. In order to ascertain the relative value of dry and irrigated land as shown by the yield of each, and to enable us to collect other necessary statistical information, do you not think it is advisable to prepare a lithographed form of questions to be answered by the Mukhi and Talati of each village ?

I have \&c.,
C. J. PRESCOTT,
Superintendent, Revenue Survey, Gujarát.

$$
\text { No. } 114 \text { op } 1860 .
$$

## From

## W. G. PEDDER, Esquire, <br> 'Assistant Settlement Officer in Gujarit ;

To

## Captan C. J, PRESCOTT,

Superintendent, Survey and Assessment, Gujarát.
Ahmedabad, 18th August 1860.
Sir,
I have the honour to reply to your letter No. 193, dated Ilth May last, regarding certain proposed changes in the present system of bagait classification and assessment.
2. As far as my limited experience enables me to form an opinion, I entirely agree with you that some change is necessary. But the subject is an intrn cate and difficult one, and I beg to be considered as speaking with great diffidence.
3. One of the principal objects at which the survey aims I conceive to be to convert the present class of Government rayats into peasant proprietors, whose lands shall be subject to a tax or quit-rent fixed for a certain number of years and then liable to revision upon general principles, and rather with reference to the financial and commercial state of the country than to the circumstances of individuals.
4. What, then, are the sources from which this tax may legitimately be drawn? You will agree with me that they are the natural capabilities of the land, and also that the possessing a capability of irrigation is as much one of those natural capabilities as the possessing soil of a certain depth or of a certain quality.
5. If so, it follows that theoretically no distinction should be drawn between dry-crop and irrigated lands. A field capable of producing sugarcane should be rated higher than one only capable of producing jo vár whether a well exists in the former or not ; that is, supposing that the capital expended on the production of sugarcane would give a larger proportionate return than that expended on the production of jovár.
6. In certain cases I think this principle is capable of being and should be applied. Thus, permanent lands situated under the banks of rivers which are always cultivated by means of irrigation and where water is always procurable by the expenditure of a certain amount of capital and labour, are now taxed by a cess upon the leutcha wells used to raise water, in addition to the soil or dry-crop rate. They should, I think, be taxed by a simple soil rate, the measure of which should be the relative value of the produce to the capital and labour required to raise it.
7. But, with regard to irrigated lands in general, I am aware that there are insuperable obstacles to any scheme based on this theory. We cannot tell in what land it would pay to dig a well, for the divining-rod which country folks at home believe points of itself to the spot where hidden springs exist, forms no part of the dead stock of a classing establishment, and, if it did, we have no agency capable of estimating the extra value which the existence of a well would add to the products of a field. We must, therefore, endeavour to devise an equitable scheme for taxing the means of irrigation which exist," which, in Gujarát, are usually wells, and to wells alone does your letter under reply refer.
8. Before I proceed it seems necessary to point out a distinction, from losing sight of which this subject has been somewhat. confused - I mean the distinction between the case where the State is merely what, for want of a more precise expression, I must call the landlord deriving a tax or rent from and in proportion to the natural capabilities of the land and the case where the State is also in the position of a capitalist deriving a profit from money laid out in works of irrigation. We must enquire what the measure of that profit will be.
9. Supposing A, a rayat, has 1 acre of land producing annually a dry-crop value Rs. 15 and paying a tax to the State of Rs. $2 ;$ B, Government, an irrigation company, or a capitalist, digs a well by which the rayat can raise an irrigated crop, value Rs. 15. Deducting Rs. 50, the value of the extra labour and capital (in lifting the water, manure, fences, \&c.,) required to raise an irrigated crop, it is evident that A could afford to pay B for as much water as the irrigated crop requires, Rs, 50 . In practice it would be B's interest to demand somewhat less, in order to leave $\mathbf{A}$ an extra profit which might induce him to buy the water, but this formula expresses the measure of the demands of B. Whether, in case of Fovernment itself constructing works of irrigation, it ought to demand as much as a private capitalist would undoubtedly do, or whether a sounder policy would not confine itself to a reasonable interest on capital expended, is a question into which I need not now enter. It must be remarked that, in the above case, supposing B to be a private capitalist or company, the State would have, I think, an undoubted right to levy from A some additional tax on account of the capability of the land for irrigation proved now to exist. And this additional tax, though nominall levied from $A$, would in reality fall upon the profits of $B$.
10. To return. Government now possesses the right of taxing certain wells, or, which comes to the same thing, of levying a higher rate from certain lands on

- $362-12$
account of the extra value which the existence of those wells gives them. This right has apparently been acquired in various ways. In a few cases Government wholly or partially constructed the wells ; in some, private wells have lapsed on failure of heirs. In other cases cultivators have thought it worth their while to sink a well in Government land, knowing that they would be more heavily rated in consequence, and judging that the extra profits which they would derive from the power of irrigation would conpensate them for this; while in perhaps the majority of cases the wells have been sunk by farmers of the revenue on the expiration of whose leases they lapsed to Government. As, under the old system, these farmers raised the revenue from the rayats by means of crop cesses or of actual division of produce, they found that the greater value of irrigated crops would compensate them, by the end of their lease, for the capital expended upon the construction of means of irrigation.

11. It appears to me that as the capability of the land for irrigation can only be taxed when the means of giving effect to that capability, $\rightarrow$ that is, a well,exists, it can only be taxed through those means, and consequently that whether the extra taxation is levied by means of a crop cess or a bagáit rate on the land, or in any other way, it falls in effect upon the well. It now becomes our business to determine what should be the measure of these Government demands on wells, and in what way the amount demanded should be levied. I will consider the last point first.
12. In reporting on the experimental introduction of the revised rates into some of the Dholka villages Mr. Rogers stated the relative advantages of, and the objections to, each of four plans for the assessment of irrigated lands which occurred to him. These I cannot do better than repeat here.
I.-A single permanent rate, including both the soil and water rate, fixed on the field, and levied whether irrig ation is employed or not.

## Pro.

(a) Convenience of administration, as obviating the necessity for annaal inspection or measurement.
(b) Would stimulate the cultivator to industry, as since he would have to pay the same whatever the nature of his coltivation, the more valuable crops would give him the larger proportionate returns.

## Con.

(a) Would tend to keep the standard of assessment low, as, if it were pitched too high, the land, which requires occasional fallows and rotation of dry crops, would be thrown up.
(b) Would afford no remedy if the well fell in or became asit, in which case the land would be thrown ous of cultivation.
(c) Would involve great risk of error at the time of setclement, from the difficulty of ascertaining what fields have a right to water, and should consequently be assessed as garden land.

The first of these objections seems to me rather apparent than real; but as this scheme is very nearly that which has been adopted for the parganas of Daskroi and Jetalpur, I will defer a closer examination into its working.
II.-A. water rate fixed on the field, to be levied in addition to the soil rate when an irrigated crop is grown in any portion of the field.

$$
\begin{aligned}
& \text { Pro. } \\
& \text { (a) Would afford a remedy if the well } \\
& \text { became salt or fell in. } \\
& \text { crop. Would save annual measurement of } \\
& \text { crops. }
\end{aligned}
$$

(c) Would allow for fallow and rotation of crops.

Con.
(a) Would tend to keep the pitch of assessment low.
(b) Would involve great risk of error in ascertaining what fields should be subjected to the water rate at the time of settlement.
(c) Woald involve annual inspection of crops and consequent risk of frand

Besides the above objections it would, I think, be difficult to estimate the capabilities of the field and well jointly, so as to know what average amount of irrigated cultivation, on a series of years, may be expected.
III.-Water rates, varying for the superior and inferior kinds of irrigated crops, fixed upon the well, and levied by annual inspection and measurement of the land cultivated with each crop, in addition to the soil rates fixed on the fields.
I need not, I think, go into the relative advantages of this scheme, as it appears to me that it would act as a direct check to agricultural enterprise; and, as it is nothing more than the old system of crop cesses in disguise, and would necessitate minute annual inspection and measurement, is altogether opposed to the first principles of our survey...
IV.-Rate to be fixed upon the kos or water-bag and levied whenever water is raised for irrigated cultivation of any sort or quantity, in addition to the soil rate of the field.

## Pro.

(a) Would save trouble and risk of error in ascertaining different water rights.
(b) Would provide for the case of wells becoming useless.
(c) Would admit of fields under wells being measured of the usaal size for drycrop fie!ds.
(d) Would foster the idea of property in wells by enabling the owners to pay the Goverament demands, and sell or let the use of his well to others.
(e) Would stimulate industry by the Government demand being limited.
13. This last system it was finally determined to adopt in the districts of Dholka, Dhandhuka and Virangám. But as Mr. Rogers afterwards saw reason to abandon it, and introduced another system in the settlement of Jetalpur and Daskroi, I may consider it fnally abandoned, and need not trouble you with any lengthy reasons for considering it objectionable. Two of the principal of these objections are, however, first, that it necessitates a constant supervision and to a certain extent interference on the part of the revenue authorities to ascertain that all the water-bags actually used are paid for, which is in itself undesirable and contrary to the spirit of the survey, and also, of course, renders fraud and collusion probable ; and, secondly, that the measure of Government demands is not by it ascertained with sufficient accuracy. For the rate, the maximum being Rs. 9 , was fixed uniformly upon the water-bag with reference to the class of the village in which the well was situated, and not to the capacity of the well or to the amount of land under it. The tendency of this system would appear to be that the rayat would, once in every five or six years, grow sugarcane or some other highly remunerative crop, and in the interval would only grow dry crops and pay nothing for his well, and the result would be that Government would lose, while the natural course of agricultural operations would be disturbed. I must remark, however, that peculiar circumstances in the district itself particularly recommended the adoption of this scheme for Dholka.
14. In the 28th and following paragraphs of Mr. Rogers' letter to the address of Mr. Hadow, No. 137, dated 10th September 1859, relative to the introduction of the revised rates into the pargana of Jetalpur, Mr. Rogers stated at length the nature of the system of bagáit assessment which he intended to introduce, and the reasons for its adoption. Copy of these paragraphs I append, as you probably have not the letter on your records. Mr. Rogers has explained so clearly the principle upon which he went in fixing the bágait assessment, and which he describes as "strictly that laid down in the Joint Report," that I think I cannot do better than give an example of the process. I must, however, premise that several circumstances not noticed in the Joint Report enhance the difficulty of a process in itself somewhat complicated: The principal of these are, first, that in this part of the country the land, any part of which cun be watered from a well, very generally considerably exceeds the amount of land which the well is capable of watering in any one year, and that out of this entire amount of land which might be watered,
certain fields or rather their occupants have the right of taking water, while others have $n u t$. Secondly, that the right of taking water from a well is very generally shared, equally or unequally, among several cultivators. Thirdly, that the same well often waters both rice and garden lands. In this case, as the extra value given to the rice land by the well is assessed by the addition to the annas of the water classification, an allowance for this is made by the amount of garden land fixed under the well being reduced by one-fourth or more of the amount of rice land so aseessed.
15. In the example I am about to give I will put the maximum rates for the village in which the well is situated-at soil rate Rs. 2 , fur 16 annas of classification; rice water rate Rs. 8, at 24 annas of classification (that is, 16 annas for excellent situation as regards supply of rain water, +4 annas for good supply of water from a well, +4 annas for good supply from a tank) ; and báguit rate, Rs. 8. I will suppose all the soil to be classed at 16 annas.

The well I suppose to be a 1st class well (that is, possessing an abundant supply of sweet water at a moderate depth) and worked by two water-bags. As one water-bag in such a well is supposed to be capable of watering, on an average, 31 $\frac{1}{2}$ acres of land, 7 acres of garden land will have to be apportioned under this well.

There are 10 numbers, contaiuing 30 acres, into any portion of which the water might be conveyed.

There are 3 persons having a right to the water : namely, A, having a right to half a water-bag ; B; to half a water-bag ; and C, to a whole one.

The lands under the well in the occupation of these persons, and on which alorie must the $\mathbf{7}$ acres of garden land be, of course, apportioned, are as follows:-

16. It remains to determine, from the above data, what will be the assessment of each number. This will be effected as follows :-

| Sharer. | Amonnt of Garden Land to be apportioned. | Nam. bers. | Acrea. | Bagáat Land, Acrea. | Rupees. | Jirait $\substack{\text { Jand, } \\ \text { Lacres. }}$ | Rapeen. | Water Clasmif. cation of Rice. or | $\begin{gathered} \text { Akar } \\ \text { of } \\ \text { Number. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A... | $\begin{aligned} & \text { A. g. } \\ & 130\{ \end{aligned}$ | $\begin{aligned} & 100 \\ & 101 \end{aligned}$ | $\begin{array}{cc} \text { A. g. } \\ 1 & 0 \\ 4 & 0 \end{array}$ | A. $g$ 10 030 | $\begin{array}{rr}\text { Rs. a. } \\ 8 & 0 \\ 6 & 0\end{array}$ | A. g. $\dddot{310}$ | Rs. a. $\dddot{6} 8$ | $\cdots$ | $\begin{array}{rr}8 & 0 \\ 12 & 8\end{array}$ |
| B ... . ... | .1 30 | 102 | 10 | 10 | 78 | $\cdots$ | ... | $\cdots$ | 78 |
| C ... | $320\{$ | 103 104 105 | $\begin{array}{lll}3 & 0 \\ 4 & 0 \\ 3 & 0\end{array}$ | 110 120 $\ldots$ | $\begin{array}{cc}10 & 0 \\ 12 & 0 \\ \cdots & \end{array}$ | 130 220 $\cdots$ | 3 8 <br> 5 0 <br> $\cdots$  | $\cdots$ | $\begin{array}{ll}13 & 8 \\ 17 & 0 \\ 28 & 4\end{array}$ |

17. If the argument in my 11th paragraph is correct, it is plain that all the extra assessment beyond the soil rate and, in the rice number, the áháshya water rate is, in the above case, really a tax upon the well, and that the process above described is merely a method of ascertaining and apportioning that tax. And this position is strengthened by the following instance. If, in the above case, $\mathbf{C}$ chooses he need not employ any part of his water in the cultivation of his own lands, but maty sell the right of using his water-bag for one or more years to rayats holding any of the other numbers which are capable of being watered
by the well. In this case surely that which is taxed is not the right of $\mathbf{C}$ in the land, but his proprietary right in the well; or, in other words, the tax is borne by the well and not by the land.
18. If so, by an analysis of the rates in the above instance we shall find what is the amount of the tax on the well. Taking the amount of land, which the well is capable of watering, at 7 acres and the bágaít rate per acre at Rs. 8, and deducting from this sum the soil rate of the land, Rs. 2, it is evident that the tax on the well will be Rs. $6 \times 7$, or Rs. 42 ; and that A will pay Rs. $10 \frac{1}{2}$ for half a water-bag, B the same, and C Rs. 21 for one whole water-bag. In the above example, however, the pecatiar circumstances of the proprietors of the well have modified the amount as follows:-A pays on No. 100 hs .6 (deducting the soil rate), and on No. 101, Rs. 4-8, total Rs, 10-8. But, for the same amount of water, B. who has only 1 acre of land, can of course pay only Rs. 6; and a further deduction of 8 annas being made, because the extent of his land does not admit of rotation of wet and dry crops, his share in the well is taxed only Rs. 5-8.. C has one number (105) of rice land, the water classification of which is raised from 16 annas to to 20 annas on account of the well, or, at the supposed maximum rates, from Rs. 5-6 per acre to Rs. 6-12, and the ákár of the number is raised from Rs 22.2 to Rs. $26-4$. On this number, therefore, $C$ pays a well-tax of Rs. 4-2; but, on account of this, one-fourth the quantity of the rice land (qr acres 0.30 ) is deducted from the amount of garden land to be apportioned on the remaining Nos. 103 and 104, and consequently only acres 2-30 are apportioned instead of acres 3-20, and the well-tax paid upon Nos. 103 and 104 will be Rs. 16-8. The whole tax paid by $C$ for his share of water will thus be Rs. $20-10$ (instead of Rs. 21), and the tax on the whole well will be Rs. 38-10 instead of Rs. 42
19. It is evident that this system aims at a much greater degree of accuracy than that adopted in Dholka, and also that it possesses one great advantage over that system, in not requiring any annual inspection on the part of Government officers. But, on the other hand, it appears to me to be open to grave objection. It is unsound in theory, because it is not what it represents itself to be; but while professing to levy a tax from irrigated lands it in reality imposes it upon wells. It resembles tho case of an income-tax which Government should determine to levy, not by a direct percentage, but by taxing every man's house in proportion to his income. It may be said that this would make no practical difference, as the tax would be the same under a different name. But, to complete the analogy, we must suppose that the house-tax, having been once fixed at a percentage on the income of its occupant, is to remain the same for thirty years whether its occupant becomes richer or poorer, whether he continues to live in it or not. Would not this, by introducing an artificial desturbing element, completely overturn the existing natural value of houses? People when about to buy a house would not first consider its size, situation, or other advantages, but the amount of its tax, and I think I can show that the present system of bagaít assessment will similarly tend much to impede the free transfer of land.
20. Suppose, in the case given, $\mathbf{C}$ sells his water right to another rayat, $\mathbf{D}$, and then dies. His heirs refuse to take up his lands on account of the heary assessment on them. It is evident that Government luses, as long as Nos. 103, 104 and 105 remain unoccupied, the whole of the well-tax upon C's land. If another rayat, E, should take up these numbers he will, of course, demand the use of C's water-bag for which he pays. But D would say that he had paid a full equivalent for the water-bag, and that he intended to retain it. To whom, then, is the water-bag to be given over? And by what authority? Again, if the numbers remain waste, how is Government to levy its just dues on the well? To impose a bágaít asseesment on the landsin the possession of $D$ would be a breach of the guarantee of the permanency of the field rates. The only remedy left then for the Collector wonld be to impose a rate upon the water-bag in the possession of D. and refer him to the Civil Courts for redress by an action to recover the purchase-money of the pay from the heirs of C. But it is very doubtful how such a suit would be decided. Again, in the case of A, supposing be throws up No. 100 on which he pays Rs. 6 as well-tax and retains No. 101 on which he pays Rs. 4-8, who is to see that he only uses a quantity of water proportionate
to the reduced tax he pays? And, if another rayat takes up No. 100, who is to take care that A. lets him use a fair quantity of his water? Again, supposing that B's No. 102 becomes waste, who is to prevent A from using the whole water-bag instead of the half to which he has a right? Again, if some of the other numbers capable of irrigation from the well, but not assessed at bágrít rates, fell waste, what is to prevent one of the proprietors of the well from taking up those numbers and irrigating them, and then throwing up his own numbers assessed at bdgdít rates? What remedy has the Collector? He cannot legally dispossess the rayat of his rights in the well, and the only way would be to put a cess upon the kos. But still Government would •ose ${ }_{2}$ as the numbers assessed at bágáit rates would certainly remain waste. Again, if a well falls in or becomes salt, what remedy have the rayats? Is the well-tax to be shown as a yearly remission to them, and if so, how is the amount to be ascertained (especially in the case of rice lands)? Or must the bdgdit numbers be re-assessed at dry-crop rates, and, if so, what is to be done if the rayats afterwards repair the well? Again, if the holder of alienated land waters it from a Government well, we now are obliged to tax him for this privilege by a piavo or water rate on his land, and of the legality of this I entertain some doubt. Again, if at the time of settlement a well is out of repair we now estimate what would be the expense of rendering it fit for use and make a proportionate deduction from the bagait rate. But it is very difficult to make this estimate correctly ; and if it is too low, Government loses, while, if it is too high, not only is the well disused, but all the numbers under it assessed at bagait rates remain waste.
21. It may be said that all these are exceptional cases and not likely often to occur. But I reply that they may occur, and that a good system should provide for all cases, and also that several of these cases have already occurred in the pargana of Jetalpur, although the new system was only introduced last year and experimentally, and that I am much perplexed to know how to deal with them; and it seems to me that all these practical difficulties have one origin, namely, the false principle of taxing wells indirectly by a rate upon land, instead of directly: It seems to me that all difficulties have a tendency to depress the value of irrigated lands as compared with that of dry-crop lands, and this we should certainly do our best to avoid, as it is the increase of the more remunerative irrigated cultivation to which we must in great measuré look to promote the growth of agricultural capital.
22. But it is not alone the difficulties attendant on the administration of a settlement on this principle, when once made, to which I have to draw your attention. The difficulty of making the settlement itself satisfactorily appears equally noticeable. You will have seen that this systen aims at great accuracy, which if it does not attain, the trouble and expense attendant on it are entirely thrown away, even if it does not altogether break down. Now to attain this accuracy the settling officer is altogether dependent on the correctness of the information supplied to him upon a great number of minute particulars. Thus a mistake of the classer in the capacity or quality of a well, in the quantity of land capable of being irrigated by it, in the numbers the occupants of which have a right to water, in the shares of water, may, though each mistake be in itself trivial, have effects fatal to the settlement as far as that well is concerned. And a complicated and delicate system of this kind cannot be defined by a few simple rules. Such rules must frequently be modified by fresh orders to meet fresh difficulties coming to the surface, and the more such orders, however well devised, are multiplied the more likely is the native agency, however willing and zealous, to misunderstand them. Mistakes are made, corrected and again made, the work is impeded or stopped, and mutual recriminations ensue. But I need not enlarge on this subject, as you are aware that the Jetalpur bágait settlement is far from being altogether satisfactory, and that the inaccuracy of the bagait talktas was one of the principal reasons why the revised rates were not last year introduced into Daskroi.
23. But I may be alloved to say a few words on this subject, as it affects me personally. I am aware that you look to me to conduct the details of the settlement, your own more immediate work preventing you from giving more
than a general sapervision to it, and that if I have to refer to you on every petty question I shall be worse than useless to you as an assistant. Now. Mr. Rogers, when settlement officer, from his long experience of the country and his intimate acquaintance with the work, the language, and the systems of cultivation, was enabled to detect errors at once, and often to correct them while makng the settlement and without further reference, which I, who cannot lay claim either to that gentleman'sability or to hisother qualifications, should probably have overlooked altogether, and thus vitiated my settlement. I should much prefer to be permitted at once to resign my present appointment rather than undertake work in which I know. I should probably fail, and which could but end in disappointment and in waste of time and money, and I feel that if I undertake this work I must rely, not upon my knowledge or personal qualifications, but upon my having a sound and workable system. Such a system, however, I think it is in my power to suggest for your consideration.
24. You may recollect that in conversation upon this subject some months .ago I suggested the practicability of imposing a permanent rate upon wells totally distinct from the land, and of administering the wells in precisely the same manner as a survey number is administered. Further reflection has convinced me, not only that this scheme is feasible, but that it will remove most, if not all, of the difficulties both in the original settlement and in the subsequent administration which now meet us, and will be highly acceptable to the people themselves. The details of the system I propose are briefly as follows.
25. A statement, to be called the well register, should be kept for each village, to contain the number and name of each well used for irrigation, the name of its holder or holders (who are to be considered as survey occupants); the value of the share of each man expressed in fractions of one water-bag, the total assessment fixed on the well, and the proportionate amount to be levied from each share. The method by which the amount of the total assessment on the well is to be ascertained I will discuiss hereafter.

The well should be administered in all respects as a survey number ; that is, each sharer shall be permitted to do precisely as he chooses with his share so long as he pays the Government assessment upon it, and this totally irrespective of what lands are in his occupation or of whether he holds any land at all. But transfers of names in the Government books and consequently of responsibility for payment of the assessment can only be effected under rules similar to those laid down for sub-divided survey fields, of which the principal would be the following :-1st. No further sub-division of original shares should on any pretext be shown in the register. 2nd. If an occupant wishes to throw up his well or share in one he must give in his written rajinama to the effect before the Murgsall. 3rd. If a well is thrown up, its occupancy may be granted to any person who chooses to undertake for its assessment, and if two or more persons wish to take it up it should be sold to the highest bidder. 4th. If a share in a well be thrown up, it should be offered, (if a share in one water-bag), first to the holder of the rest of the water-bag, then to the other sharers, and, if they all refuse to take it up, finally to any other person, but less than the total assessment should never be taken ; and if one share remains vacant, the whole well must be thrown up.

The Government guarantee of the permanency of the rates of a district should include well rates.
26. Such is an outline of the system I would suggest for your consideration. Its details will have, of course, to be arranged hereafter, and probably modifications in the plan may be found necessary; but the best consideration I have been able to give to the subject has convinced me that the principle of the system is sound, and that there exist no insuperable difficulties to its adoption. The principal objections which I foresee are two : first, the danger that when the well rate is distinct from the land the raynte will throw up their wells and construct new ones in the same lands. I think, however, that I shall be able to show, in the proper place, that under the well valuation which I propose this will never be profitable to the rayat, and even if $I$ an wrong in this I do not think the objection is necessarily fatal to the scheme, as we might devise some special rule such as that a clause should be inserted in the agreement under which the
rayats hold their lands, binding them not to sink new wells int certain numbers. Of the weight to be attached to the second objection I entertain more doubt, as it appears to be a question to which it appears to be impossible to reply with certainty a priori and until it has been brought to the test of actual experiment. It is, whether, in case one share of a well is thrown up, we shall usually find the other sharers or other persons willing to take it up. If we do not, the hardship which the other sharers will suffer in having to throw up the whole well is an objection deserving serious consideration. But, as far as I can judge beforehand, I think, that, from the great increase in value which the possessing means of irrigation confers upon land under the method of ascertaining the amount of well-tax which I am about to propose, we shall always find persons eager to take up the relinquished shares in a well and, in fact, that these will become saleable property. We may possibly find it necessary to relax the rule so far as to allow entire water-bags to be thrown up without their necessitating the entire abandonment of the well, and, in this case, the Mámlatdar must take care that the machinery for working the relinquished water bag is removed from the well. It would, however, I think, be desirable, if possible, that no modification be made in the rules on account of either this or the former objection.
27. It has occurred to me that it may possibly be further objected that there may be legal obstacles to the collection of the well-tax. I do not myself think that there are, but that the well-tax might be levjed as land revenue under Regulation XVII; but I am not aware that the question has ever come before the Courts, and even if I am wrong in my opinion I do not apprehend much difficulty. We shall, of course, distinctly specify, in the agreements of the occupants of wells, the conditions upon which they hold them; and in the very improbable case of the Collector being obliged to sue the occupant upon his agreement the suit must, of course, be decided in favour of the Collector.
28. You will observe that the objection of the difficulty of ascertaining exactly the shares of water applies with at least equal force against any other system. You are aware that although the shares are generally described as half or a quarter of a water-bag, what is really meant is the right of working that bag for half or a quarter of the time during which it can be worked. I believe that disputes among the sharers very seldom occur, but if they do, this scheme has, I think, a decided superiority over any other in the facility with which such disputes may be decided. For, the sharers having been once ascertained by the survey and entered in the well register, the latter will always show at once what the real rights of each sharer are,
29. Assuming that the scheme is practicable you will, I think, see its advantages. It disposes of all the objections which I have urged in paragraphs 19 and 20 above, and is, I think, simple and intelligible to the people themselves. It does not disturb the natural course of agricultural operations, and it permits the rayat to extend or contract his cultivation or to change its nature as he finds convenient or profitable. It has, besides, the advantage of obviating one of the great difficulties which you have encountered-I mean in the case of rice lands. As you know, rice lands in Gujarát are divided into very small portions, and, consequently, taking the size generally desirable for a rice number at 4 acres, this would often contain 8 or 10 different shares, all of nearly equal value as regards the ákáshya rates. But, out of these, one or two shares only may have the right of taking water from a well, which raises considerably the classification of their shares. As the whole number is, of course, assessed in one sum, one of two things happens : either the classers (as they are apt to do) finding that water is conveyed into the number and that the whole of it may be watered, class the whole number as irrigated from a well, in which case the assessment of the whole number is too ligh, and all the sharers, except those who have rights in the well, pay too much; or else the classers correctly ascertain the amount of the land having a right to water, and the assessment is fixed on the average, in which case the assessment of the whole number is correct; but the sharers who have water rights pay less than their proportion and all the rest more. This difficulty has been so much felt that rice numbers, in order to avoid it, have been very generally measured of an inconveniently small size. You have lately introduced the pot number system by which each sub-share is separately classified,
but this also is open to objection. But by the proposed scheme for well assessment this difficulty would be entirely obviated, as the whole number would be measured of the size most convenient and classed at its aikashya value, and those sharers who had rights in a well would pay for them separately. A similar advantage attends the scheme as regards dry-crop lands. At present the measurers are abliged to carefully avoid including the land of a man who has a right to the water of a well in the same number with that of a man who has not; otherwise, as the proportion that each pays of the whole assessment of the number is determined by the relative quantity of his land in it, the latter would be paying more than ke ought and the former less. But, if my scheme is adopted, all fields may be measured of the usual dry-crop.size.
30. Should you consider the plan I have proposed worthy of experimental adoption it now remains to consider what should be the measure of the well-tax, and this part of my subject is what I feel the greatest difficulty in approaching. I must, therefore, request that you will make allowance for my inesperience should you consider any of my views crude or unsound.
31. In order to avoid the first of the objections alluded to in my 26th paragraph, I would lay it down as the first of our rules that the maximum well assessment should never exceed the annual interest of the money which the construction of a similar well would cost. And I think we shall find that the well assessment, which it is desirable on other grounds to improve, will always fall considerably short of this amount. From the best enquiries which I have been able to make I find that the construction of a brick well for two water-bags never costs less than Rs. 250, and more commonly Rs. 400 or Rs. 500, and also that rayats can very seldom borrow money under Rs. 24 per cent., the usual rate of interest among the agricultural classes here. I have shown above in paragraph 18 that the highest rate at which a well with two bags is taxed under the present bágaít rate system is Rs. 42. Supposing this well could be constructed for Rs. 250 , the interest on the sum at Rs. 24 per cent. would be 'Rs. 60 per annum, or Rs. 18 in excess of the rate, and it must be noticed that the actiual well-tax under the bagait rate system would very seldom and only in the most favourable circumstances reach Rs. 21 per water-bag, while I think the direct welltax we shall find advisable to adopt will rather fall short of, than exceed this.
32. Beyond this rule I fear that what I have to say on the subject of the principles on which it is desirable that the amount of well-tax should be fixed nust be rather suggestions than definite proposals submitted for your sanction. And in order to explain my views it will be necessary for me to refer briefly to the principles on which our land assessment in general is levied.
33. You are aware that the usual native revenue system was that of bhágbattai or division of produce. This appears to me to be a pure metayer system ; that is, profits and losses were borne equally by the cultivator and by the landlord, or State. If the rayat cultivated badly and so got a return from his lands less than the average, the State bore half (or other proportionate share) of the loss, the result of the rayat's want of skill or energy. If, on the other hand, the rayat by superior cultivation managed to extract more than the average returns from his land, the State took half of his extra profits. Under this system, if it were fully carried out, it is obvious only those lands could be cultivated half the produce of which . would give the rayat, if not a profit, at least the wages of his own labour, and also that a slovenly mode of cultivation demanding a very small expenditure of labour or capital would frequently be remunerative to the rayat when a more expensive mode, although producing far larger returns, would not be so.
34. But, under our suryey system, the rayats are not metayers, but (at least for a certain number of years) proprietors, paying a fixed tax, and consequently profits and losses on cultivation fall exclusively on the rayat. By what portion. then, of the produce of land is the land-tax borne? Clearly, I think, by that portion which forms the profits of cultivation. If the rayat finds that the tax equals the whole amount of his profits, his natural course will be to throw up the land, although the hope of better seasons or attachment to his fields may induce him to be content with even somewhat less than the bare wages of his labour. If this
is so, it becomes of the utmost importance to deternine what, at the present pitch of agricultural skill, the average profits of cultivation are on different qualities of land; or, in other words, what is the relative value of produce to the capital and labour required to produce it. This being once discovered, it remains to determine what proportion of the rayat's average profits shall be levied as landtax, and this proportion, it would seem, ought theoretically to be observed, whatever may be the different average of profits on different qualities of land, though there may be reasons for modifying this rule.
35. Now, owing to the financial state of India, it is desirable tonssess each district as highly as it will bear ; that is, to fix the assessment at the pitch which will realise the largest sum for Government without checking the tendency to increased cultivation caused by the growing demand for agricultural produce. Under the survey system the total amount at which it is desirable that, according to the above principle, an entire district should be assessed, is determined by an examination of its past revenue history, showing the effects which its assessment has had upon cultivation, population, \&c., and upon the amount of reuissions. And no better method can be devised. But this does not in the least help us to determine the relative amount of tax which must be imposed upon soils of varying fertility in order to make up the whole assessment of the district. Putting on one side the question of the relative accessibility of different fields or villages as regards distance from market, \&c.,) (allowances for which are made by a different method), we depend, todetermine the amount of tax to be borne by soils of different degrees of fertility, entirely upon the classification; and, supposing the classification to be correct, that an.acre of land classed at 16 annas returns to the same amount of capital and labour exactly double what is returned by one classed at 8 annas, this principle is mathematically accurate. But it must be observed that this principle can only be applied to dry-crop and to rice lands, not to bágát lands, as powers of irrigation are not allowed for in the classing. Could they be so allowed for, this disquisition would be unnecessary, as one soil rate would include both the dry-crop and irrigated rates. The settling officer, therefore, is obliged to fix the buigüit rates in the following manner. . He first discovers, as nearly as he can, what amount irrigated land paid under the late system, either by a direct búgaíl rate or by cesses on irrigated crops, \&c., and on that information he fixes his maximum bágiait rate, reducing this below what- would appear to have been the maximum bágiít rate under the late system in about the same proportion as the survey maximum dry-crop rate is less than the old dry-crop maximum. And having thus attained a maximum rate, the settling officer must lower this rate on particular fields, or rather on particular wells, according to his own judgment. And, as far as the well is concerned, this may be done in either of two ways: by lowering the bágait rate on the land apportioned under the well, or by diminishing the number of acres so apportioned. The quantity of water which can be raised from the well determines the number of baydait acres, and the rate upon them is fixed according to the quality of the water and of the soil, the amount of land under the well, and other particulars. Such is the system adopted in Jetalpur, butit seems to me that a more scientific one is desirable if it can be attained.
36. It is to be regretted that no effort, so far as $I$ am aware, has yet been made in this Department to ascertain the actual produce of different qualities of soil, and the expenses and profits of various kinds of cultivation. Statistics of this kind, if we could obtain such as are reliable, would be very useful if only as a check upon the classification, which, I fear, as I shall have to point out, is not quite to be depended on to show the relative fertility of different soils. Mr. Rogers himself has probably a better knowledge of the native system of agriculture than any European in Gujarat ; but now that he has left the Department I have been unable to discover upon the records of the settlement office any information of the nature required, with the exception of a report by Mr. Elphinstone, late Collector of Kaira, containing much very valuable information regarding the agriculture of that collectorate, and which, I have been told by the Desái of Nadiád and other natives, was collected with great care and can be depended upon. I myself, I am sorry to have to confess, am very ignorant upon this subject, and as I am convinced that some knowledge of it is absolutely requisite to enable the settling officer to make a tolerably equitable
and satisfactory settlement, I must endeavour to supply my want of a practical and scientific acquaintance with Indian agriculture, (which, desirable as it is, can hardly be acquired by any European and certainly by no fully employed public officer), by information obtained from others. Tolerably reliable information of this kind may, however, I think, be obtained, if we take a little trouble about it, from the cultivators themselves, and indeed as they are so deeply interested in the question it would be but fair to give them an opportunity of stating what they consider to be the relative advantages and disadvantages of various kinds of cultivation. At present we assess their fields without giving them any opportunity of expressing their sentiments on the subject.
37. I would suggest that lithographed sets of questions, such as you propose in your letter, should be prepared and given to the classers, who should be instructed whenever they come to a village to explain their meaning to the Patels and principal cultivators, and get them to answer these according to their own judgment. These answers ought to supply information on the following points :The various methods of cultivation used in the village; the average outturn of actual produce of various crops on different qualities of land, distinguishing the latter by the common native method into aval, duyam and soyam; the average expenses of various kinds of cultivation on various soils; the modes of irrigation in use; the quantity of water required by different crops ; the expense of raising water; and other similar points which your experience will be able to suggest. The classing assistants should be requested to give their particular attention to this subject, in order to ascertain that the classers have got the questions answered carefully, and not at random. The information thus obtained we might submit to the Mámlatdars, Desais, and other native officials of the district for their opinion as to its general accuracy.
38. I have conversed with several natives on this subject, and I have come to the conclusion that we may depend upon the general accuracy of the information to be thus obtained. There will perhaps be a tendency to exaggerate the expenses of cultivation and to represent the returns as less than they really are. But a little experience of the working of the system will enable us to make whatever allowance may be required for this; and as the cultivators will have no direct interest in misrepresentation, since they will know that. whatever they may state will not alter the total assessment of the village, wo have reason to anticipate that the information they give will be in the main correct. And this information is what they alone, if they choose to do so, can give with accuracy.
39. When a sufficient quantity of these statistics has been obtained, and when we have convinced ourselves of their general accuracy, it will be a comparatively easy task to fix the niaximum well rate (according to the number of water-bags) for each group of villages, and to deduce from it the rate to be imposed upon each well. But it will be some time before this information can be obtained; it may turn out to be worthless, and in districts which have been already classed it would be inconvenient to send classers back for the purpose of making these enquiries. I must, therefore, for the present fix the well rates as well as I can upon other considerations, and in order to be safe must keep the maximum rate low. The following appear to be the points to be considered in adjusting the rates.
40. The value of the well, independently of its accessibility, depends, of course upon the quantity and kind of the irrigated crops which can be grown under it, and this depends, first, upon the quantity and quality of the water; second, upon the extent of land capable of irrigation by the well; third, upon the quality of the soil. The first point must be ascertained, as now, by an examination of the well itself, and by enquiring how many hours a day it is worked in the hot weather. The classers must be instructed to determine the second point by careful inspection of the ground so as to ascertain not merely into how many numbers the water is conveyed, but what amount of land might be irrigated if the occupants had a right to, the water. Measurement is not needed here ; an eye-estimate will, I think, be sufficient if made with care. But this point must be determined, or we shall not be able to see what chance the sharers in the well have of selling the water they do not themselves require.

The third point is important to determine accurately, as even when the water is good all soils will not produce the more valuable and remunerative crops. In Parantij I recollect enquiring why sugarcane was not cultivated in a place where there was an abundant supply of sweet water and the soil was of excellent quality, and I was told that the presence of white ants in the ground made it impossible to grow it. A fault of this kind should, of course, lower the rate on a well, as the power of growing a highly remunerative crop would have to be deducted from the sources of the rayat's profits. The classers should bedirected to attend to this point and to record in the bágáit takhta what is the quality of the soil, and whether anything renders it unfit for the production of the more valuable crops. As a check upon the classers a statement should, wherever practicable, be prepared from the village records, showing for the last ten or twelve years the extent of land in each year irrigated from the well and the nature of the crops raised. Such information is, I believe, generally procurable, and will be valuable, as we may, I think, take the average of actual cultivation under a well as a fair test of its value.
41. On this information the settling officer will have to deduce the rates for each well from the maximum rate fixed for the village, and I hope this may be done with a sufficient amount of accuracy. When the quantity of land capable of being irrigated is not greater than the quantity of land which the well is capable of irrigating, it will be necessary to reduce the rates to allow for the rotation of dry crops. But when there is a sufficient quantity of land under the well, but the land in the possession of one sharer is not greater than what can be always irrigated by his share of water (as in the case of No. 102 in the example I have given at paragraph 17), I hope that we shall find that the sharer will be able to sell his water when he does not himself use it, and consequently that we need not reduce the rate upon his share. For it is very essential to the scheme always to divide the total rate on the well by the number of minimum shares.
42. When wells water rice lands the rates upon the well must be determined chiefly with reference to the quantity and quality of the water and the extent of the land into which it can be conveyed.
43. When the statistics I have proposed to collect are arranged, we shall, I believe, find that we have been taxing irrigated cultivation proportionately more lightly than dry crop; that is, that the proportion of the rayat's profits from dry-crop cultivation, which is taken as the share of the State, is greater than that from irrigated cultivation. But I do not know that this is to ho regretted. In England the farmer has two great sources of profit-the growth of corn and that of meat, and the money value of each of these fluctuates with and depends on that of the other, so that the farmer has, as it were, two strings to his bow, and can employ his capital in the production of the one or of the other as he finds it most profitable. But in India the vegetable products of land alone give employment to agricultural labour and capital, and these are divided under two great heads-the coarser cereals upon which the rayat depends for the subsistence of himself and his family and any labourers whose services he may require and for which, except in the immediate neighbourhood of towns, there is no great demand, and the more valuable products for which there is always a market, and which always command a money value, Were there no land-tax, or were it paid in kind, a market for agricultural produce might almost be unnecessary. And this, I have heard, is, in fact, the case in the territories of some of the Native Chiefs where money is almost unknown among the cultivators and where their families are entirely supported by the produce of their fields, while the produce rents maintain the Chief and his retainers. But where the land-tax is levied in money, a market for agricultural produce becomes absolutely necessary. And this explains what, I believe, has been often noticed, the rapid decrease in the nominal prices of agricultural produce whenever the produce rents of a district have been commuted for a land-tax paid in cash. To raise the money the cultivators are obliged to throw a great quantity of produce into a market where the demand is yery slack, the market is immediately glutted, prices fall, and agricultural distress ensues. But when the tax has been for some time levied in money, the cultivators grow wiser, each man raises the coarser cereals to the amount required for the support of his family,
and he depends to pay his assessment on the more valuable products which always command a money price. It seems to me that, by taxing the more valuable or (which in Ahmedabad and Kaira is the same thing) the irrigated produce more lightly in proportion than the dry crop, we hold out to the rayats an inducement to extend their cultivation of these products beyond the amount required merely to pay their assessment. When this is the case; the peasant does not merely support his family from the produce of his fields; but the more valuable products, useless to him in themselves, are turned into money, which is either expended in material comforts (thereby stimulating trade and elevating the condition of the people), or accumulates and becomes agricultural capital. The state of the Broach Collectorate is an example of my meaning. In it there is little irrigation, but the soil is "eminently favourable for the growth of cotton, which is produced in far larger quantities than is required by the people themselves. But for cotton there is always a demand, and the sea-ports of Surat, Broach, and Tankaria Bandar always supply convenient markets. The Broach cultivators consequently merely grow enough of the coarser cereals to supply: themselves and their families, and devote all the land and capital they can to: producing cotton. The result is that the people are better off as regards material comforts, their character is more energatic and enterprising than in any other: district with which I am acquainted, while the amount of agricultural capital seeking employment is shown by the inconsiderable amount of land lying waste; and the eagerness with which the people compete for the occupancy. of fields.
44. I have not answered the questions in your letter in the order in which they come, but I think that all have been replied to above, except the second, $\mathrm{i}^{\mathrm{n}}$ which you enquire whether I thins we shall have to raise the classification ann ${ }^{\mathbf{a}}$ value of soil under wells, or whether it would be better to have a separate rate for jiráit and bágaít soils.
45. As I have noticed in my 5th paragraph, were it practicable to allow. for the powers of irrigation in the classification of a field we should be relieved from a great difficulty, as there would be no necessity for a well rate, a bágaít rate, or any way of taxing water at all, but each field would be classed directly in proportion to its productive powers. But I an convinced that this method is impracticable for many reasons, but principally for this one, that the capability of a field of being irrigated from a particular well is altogether distinct from its possessing a right to the water. But I agree with you in what your question seems to point at, namely, that the soil rate of land under wells is generally too low, and for this reason that, I believe, under our present system the best lands are usually rated lower proportionately than inferior scils. And irrigated lands are usually the best soils, because the country undulating gently the finer particles of soil are washed down into the hollows, and in these hollows are wells usually constructed.
46. Though it is a digression from my subject I may perhaps be permitted to explain my grounds for this belief. The system of classification adopted in the Deccan and explained in the 41st and following paragraphs of the Joint Report divides all soils into three orders, and assumes as the quality which principally affects their fertility and consequently regulates the scale of value, their depth. This system has, 1 understand, been found to work admirably in the Deccan, and possesses, I doubt not, as near an approach to iscientific accuracy as can be obtained, having been determined on by the inductive process of an examination of many different fields and an enquiry into the causes of their varying fertility. But l cannot but think that it was too hastily concluded that a system suitable for the Deccan, a rocky table-land, was equally well adapted for a country, like Gujarat, composed of a vast diluvial deposit. There are two especial points of difference between the two provinces:first, that the goradu soil so prevalent in Ahmedabad and Kaira does not correspond with any of the three orders of soil given in: the Deccan.scale. It has been, arbitrarily I believe, placed under the second of these orders, and consequently, in districts where both black soil and goradu are found, the best sort of the latter is classed 2 annas lower than the best of the former, although it is usually thought that good goradu (especially when both are irrigated) excels in productive power good black soil. The second point is that, nearly through the whole of Gujarat all soils are of one uniform, that is, practically unlimited depth. The consequence
is that either the classers class strictly according to the rules when, differences in depth affording no guide to differences in fertility, good and bad soils are valued pretty nearly the same, or else the classers, being aware that a difference in productive power exists, are driven to the expedient of inventing imaginary faults in order to reduce the classification value of the inferior soils. Even the faults, according to the Deccan system, do not in Gujarát always represent a decrease in fertility. For instance, want of cohesion in the soil is a fault; but the best goradu soil in the districts south of Kaira is, when dry. a fine impalpable powder. Yet this soil is generally considered to be the most fertile in Gujarat, and its astonishing productive power is shown by the number and beauty of the trees in this part of the country and by the magnificent crops of sugarcane, tobacco, and (in the Gáikwarr's district) poppies wihich it produces.
47. It is true that we have had, as yet, no complaints from the people themselves of inferior soils being rated proportionately too high. But the rear son of this is, I think, that the survey hitherto has considerably reduced rates generally, and that each holding containing generally good and inferior lands, the cultivator has on the whole felt the relief of this. But that the rayats do not acknowledge the accuracy of our classification as really representing the variation in fertility of different soils the enquiries which I have made have convinced me. An'instance is the following: I found when accompanying you to test some classing in Parántíj one day two fields gccupied by the same person and near each other. One was in a hollow, the other on a gentle slope somewhat above it. I asked the owner what he considered to be about the average outturn of each, and he told me that he should regard 25 maunds of bajiji per acre as a good crop for the former, which he said was aval, and 8 maunds for the latter, which was doem, manure being the same for both. And this estimate was concurred in by the Patels who were present. These two fields were classified correctly according to the rules, the aval one at 13 annas and the doem one at 10 annas 6 pies. Did the classification correctly represent the difference in fertility, the best field being classed at 13 annas, the other should be classed at annas 4-3.
48. If the surtey is ever introduced into that part of the Broach Collectorate which lies between the Dádur and the Narbada this question of the classification will, I fear, give no little trouble. For the whole of this part of the country is on a dead flat, and is composed of black soil of an apparently similar texture and quality, so that it will be very difficult for the classers under the present rules to make differences of classification in different fields to allow of the variations in fertility which unquestionably exist. And as it is probable that the existing rates will be very little, if at all, lowered by the survey, great discontent among the holders of inferior lands will be the result if they find themselves rated proportionately too high. You may possibly for these reasons consider it worth while, before we introduced the settlement into another zilla, to attempt some enquiry into the different degrees of fertility of different soils, the causes of these variations, and the signs which accompany them and by which they may be discovered.
49. Should you consider the scheme for well assessment which I have proposed, or any modification of it, worthy of a trial, I would suggest that we make the first experiment in the pargana of Parantij, where there is not very extensive well irrigation, and where the other difficulties of the settlement will, I hope, not be great. It is too late to attempt this scheme for Daskroi, besides that Mr. Rogers intends to introduce the settlement himself into the latter pargana.
50. I will conclude by a brief resumé of the arguments I have attempted to employ in the above report:-

There are two sources from which lands capable of irrigation may pay a revenue beyond the dry-crop rates:-

1st.-To the State, as landlord, from their natural capability for irrigation in water being found near the surface, a river being in their immediate neighbour: hood, \&c.

[^0]In the first case, where practicable (as in lands irrigated by liutcha wells dug annually), the capability of irrigation should be allowed for in the classing, and the soil rate should include this, whether means of irrigation actually exist or not.

In the second case, where pucka wells, the property of Government, exist; the source of revenue is the owning the means of irrigation, and not the natural capability of the land for irrigation. Government may consequently sell the water on what terms it pleases. But the persons who occupy certain lands have usually the right of using such wells; a right of pre-emption in the water.

In order not to confound two distinct kinds of revenue, that of the landlord and that of the capitalist, it will be better to lease the right of using pucka wells to the present occupants independently of the lands they may hold,

The value of a well depends on the amount of net profit above the profit of dry-crop cultivation which can be got out of the lands capable of being watered by it.

The terms on which wells should be Ieased should, therefore, be regulated by this consideration, but should not exceed the usual interest of the money required to construct, a similar well.
51. The importance of the subject will, I trust, excuse me for the length and technical nature of this report. But I feel I ought to apologise for not confining myself to the immediate subject of your letter, and for troubling you with my views on several collateral topics, with reference to which you may perhaps consider that my opinion was,not required.

I have, \&c.,
W. G. PEDDER,
Assistant Settlement Officer.

No. 424 or 1860.

## From

Captain C. J. PRESCOTT, Superintendent, Revenue Survey, Gujarat;

To
S. MANSFIELD, Esquire, Revenue Commissioner, N. D.

Surat, 12th October 1860.
Sir,

Superintendent, Gujarat Survey, to Revenue Commissioner, N. D., No. 174, dated lst May 1860.
Revenue Commissioner's reply No. 1154 of 28 rd May 1860.
Superintendent's letter to Revenue Commissioner, N. D., No. 185, of 4th May 1860, and accompaniments.
Revenue Commissioner, N. D., to Saporintendent of Survey, Gujarat, No. 917, of 23rd April 1860.
Superintendent's reply of 8th May 1860, Nos. 187 and 194 of 1860.
Captain Francis, Superintendent Survey, Thana and Ratnagiri, to Rovenue Commissioner, N D., No. 501, dated 2ndOctober 1860, with scoompaniments.
Saperintendent's letter to Revenue Commissioner, N. D., No. 414 datod 9th October 1860.

With reference to the correspondence noted in the margin I have now the honour to submit the report promised in the 24th paragraph of my letter No. 187 of the 8th of Maylast and referred to in your reply No. 1471 of the 7th ultimo.
2. In the 5 th and following paragraphs of that letter I call your attention to the imperfect system of well-irrigated rice classification which bas been carried out in this province, and in the 21 st and following paragraphs I suggest a plan which temporarily and for the work now actually in

Daskroi, Parántij, Jetalpur Talukis. hand will make the classification more just and equitable than it was before ; but in my 23 rd and 24th paragraphs I express an opinion that an entire change of system is necessary before we can hope to make satisfactory permanent settlements in this province.
3. Unless the classification system of a revenue survey is based on sound principles it is worse than useless; for not only are large sums of money spent in vain, but all the officers concerned in its conduct must lose their character, however painstaking and hardworking they may be.
4. It is almost impossible for superior authority and Government to go into the minute details of a system which the peculiarities of different countries require, for the carrying out of which Government look to the officers who have been specially trained in the Department.
5. But the end of a revenue survey is the settlement, and if, after all the trouble and expense of collecting and collating data necessary for making it, the data is found untrustworty, it is but natural that Government should call those officers to account, and ask why, if they found they 'were going on wrong, they did not at once point out where the hitch occurred, and attempt a remedy.
6. Mr. Pedder and myself have all along seen (as we think) the impracticability of making settlements on the present system of rice classification and bágáit assessment, and $I$, therefore, set to work to frame a system of water classification applicable to the peculiarities of this province.
7. This system is grounded, first upon a measurement by the survey of all the subsidiary shares of rice numbers, which enables the classer to enter in his fieldbook the particular water privilege of each, and prevents his clubbing, as it were, the water privileges of all the shares and thereby fixing a water class which, however applicable it might be if the entire number were held by one individual, is not so when the water privileges of each holder (or some of the holders) are unequal.
8. I have fully explained this in the 21 st and following paragraphs of my letter No. 187 of the 8th of May last, above referred to.
9. Now, this system would work admirably in an ordinary country ; but in Gujarát, where tenure and "vahivat" are so intricate and complicated, one false step or even one oversight in detail must interfere with the final settlement. For when the value of two distinet elements has to be considered and allowed for in fixing assessments, quit-rents, and irrigation tax (pidioo), and where also the rights of alienees to Government water and of Government to water from alienated wells have to be fixed and determined, it will be apparent that very great care is requisite in collecting and collating in the field all the information necessary for making such a difficult settlement.
10. The question is, can we, by the system of rice classification and bagdit assessment which has hitherto obtained in this survey, or by the system which I have adopted as an improvement thereon, hope to collect such correct information as will prevent the possibility of injustice to individuals and mistakes when fixing water rights and privileges for the settlement? I think not.
11. Mr. Pedder, in whose judgınent I have great confidence, is of the same opinion, and on joining the Department expressed his surprise that we attempted the valuation of well water in combination with the soil rather than the valuation of the land on its own merits, and a distinct and separate valuation of the capabilities of the well.
12. On the 11th May I addressed Mr. Pedder as follows:-
(Here follows Superintendent's letter, No. 103 of 11th May 1860, to the address of Mr. Pedder).
13. To which, on the 18th of August last, Mr. Pedder replied as follows :-
(Here follows Mr. Pedder's letter No. 114, dated the 18th August 1880, to the

- Superintendent of Survey.)

14. This correspondence is so lengthy and so technical that I fear superior authority will have some difficulty in seeing clearly how we propose to fix a direct taxation upon wells, and I, therefore, conclude with a few rules which contain the gist of our arguments and proposals :-

## Rules.

1st. All bágáit lands will be assessed on a consideration of the soil value alone.

2nd. All rice lands under wells (not obtaining water from any other source) will be assessed on a consideration of soil value combined with rain water value (dkáshya).
$3 r d$. Care will be taken that the maximum well assessment shall never exceed the annual interest of the sum which a similar well would cost in constructing (calculated at 24 per cent. per annum).

Ath. The value of a well will be ascertained from the consideration of the area which it has irrigated for a term of years and the nature of the crops produced; and if a chegk is necessary, by ascertaining the number of cubic feet of water it is capable of discharging in a given time.

5th. The Government guarantee for the permanency of the rates of a district, as set forth in Rule 1 of the Joint Report, should include well rates.

6th. Every well should be assessed independent of any soil it may irrigate.

7th. A well should be managed precisely like a survey number.
8th. Each sharer, so long as he pays the well assessment, should be permitted to do precisely what he pleases with his water, and should carry it wherever he likes.

9th. It is not a sine qud non that a sharer in a well should hold land at all.

10th. The original shares as determined at the settlement should be alone recorded, and should on no account be sub-divided at any future time.

11th. Should an occupier of a well or a sharer in a well wish to throw up his well, or share, as the case may be, he must give in his written rajináma as directed for land in the 9th rule of the Joint Report.

12th. Should a well be thrown up, it may be let again to any person who agrees to pay its registered assessment.
13. If two persons should petition for the well, it should be put up to public auction at its registered assessment and sold to the highest bidder.

14th. If a share in a well be thrown up, it should be offered (if a share in one water-hag) to the holder of the rest of the water-bag, and then to the other sharers in the well, and if they all refuse to take it up, finally to any person, but less than the total registered assessment should never be taken, and if one share remains vacant, the whole well must be thrown up.
15. Captain Francis, who has a thorough knowledge of the subject, reviews

- Paragraph 2 of Captain Francis' letter to Revenve Commissioner, N. D., No. 501 of 2nd October 1860, reviewing Captain Prescott's rules.
my rules with a professional eye, and justly gives it as his opinion that they are very "complicated; and although he does not go so far as to say they will not work, has not, I am afraid, full confidence in their practicability. .

16. I see great difficulties in working these trules the compilation of which
+Vide Mr. Pedder's 14th paragraph. cost me much time and thought, and I respectfully beg to be allowed to try the experiment of separate assessment for soil and wells in the Parántíj Pargana, which contains very little rice land, and into which the revised rates will be introduced this season.

> I have, \&c.,
> C. J. PRESCOTT, Captain, Superintendent, Gujarát Revenue Survey and Assessment.

[^1]Froy

S. MANSFIFLD, Esquire,<br>Revenue Commissioner, N. D. ;

To

Captan O. J. PRESCOTT, Superintendent, Revenue Survey, Gujarát.

- 19th November 1860.

Sir,
I have the honour to acknowledge the receipt of your letter No. 424, dated 12 th ultimo, proposing a new principle of assessment on bdgait lands in Gujarát.
2. In reply I beg to observe that during my tour last year in Gujarát I heard no complaints against either of the systems adopted by Mr. Rogers for the assessment of Government bágáit lands, and from all absence of allusion to such complaints in your letter under reply I conclude you have received none likewise; such being the case I see no reason whatever for deviating from the course followed by Mr. Rogers in the Jetalpur district.
3. I cannot refrain from expressing my surprise at your calling on Mr. Pedder for his opinion on the several points noticed in your 12th paragraph. The value of an opinion on such subject depends on the practical acquaintance with them of the person giving it, and if he has none, no knowledge gained from books of the theory of rent will make his opinion worth anything.
4. Mr. Pedder was appointed to the survey in February 1860, and before he had been three months in the appointment you put to him a series of questions such as would require many years' experience in Gujarát to answer satisfactorily, and it is no discredit to Mr. Pedder that he has failed to do so.
5. Mr. Pedder proposes a permanent assessment on wells and administering the wells in precisely the same manner as a survey number, and this you adopt as feasible.

It has frequently been found difficult in practice to carry out the survey rules compelling sharers in survey numbers to cultivate portions of the same numbers relinquished by other sharers, notwithstanding Government being the landlord, and yet you advocate the same rules being made applicable to wells which are private property.

How could you compel a sharer in a well who cultivates no land to pay any revenue? Water is not taxable per se, but only through the land irrigated by it. Again, if a person wanted to sell his share of a well he is at liberty to sell it to whom he pleases; you could not compel him to sell it to any of the other sharers in the well.
6. Thé principle on which well bágaít assessment should be fixed is based on the combined consideration of the quantity and quality of water in the well and the quality of the land and quantity of it capable of being irrigated, and a rate per acre should be fixed accordingly. In a country like Gujarat, where the circumstances of bágáit cultivation are so varying, it is hopeless to expect that one rule can be made applicable to all cases. For instance, no one course could be applied where the well and land belong to the same individual and where the water belongs to one party and the land to another. Such cases as the latter I believe to be very exceptional, but wherever it does occur the bágaít assessment must be taken from the occupant of the land irrigated. Again, where thesame land is always, and where different land is in different years, irrigated from. the same well, the same rule cannot be followed. In the former case an acre rate on the particular land may be fixed; in the latter a certain rate must be fixed on the number (if the land is always in the same nomber) in the shape of a kussur, as is the case in some parts of the Deccan described by Captain Erancis in the accompanying memorandum; but where the land is not in the same number, the quantity of land irrigable from the well and the quality of land should
be ascertained, and a separate acre rate on each recorded. Again, the same course cannot be followed with wells the water of which is sweet and not likely to deteriorate and with those which may become brackish and unfit for irrigational purposes. In the latter the jirait assessment on the land should be recorded as well as the bdgdit assessment, so that when the wells become useless the former only should be levied
7. It must always be borne in mind that, however applicable Major Wingate's principles and practice of revenue survey may be in the Deccan, Southern Marátha Country, \&c., many varying circumstances connected with the land tenures, and habits, and customs of the people of Gujarát render its adoption in its entirety inpracticable in the latter country. It should, therefore, be your endeavour to apply so much of it as is suitable to Gujarát, and to devise other means where it cannot be adopted, always bearing in mind the necessity of avoiding the possibility of your proceedings being upset by the Civil Court. I think it would be desirable for you to collect during the working season such cases as could not be disposed of under Major Wingate's survey rules of procedure, reporting the same with your opinion as to the manner of disposing of them during the rains.
8. I beg to draw your attention to Captain Francis' remarks on Mr. Pedder's proposition for fixing the amount of well assessment, which have my concurrence; and I have only to add that, if Mr. Pedder's theory were carried out to its logical result, the assessment would be too high, and the greater portion of land now under well irrigation would be thrown out of cultivation.
9. I cannot consent to your making the village officers supply you with returns of produce different classes of land are capable of yielding, for the simple reason that nö reliable data of the kind are procurable.
10. Mr. Pringle fixed his assessment in the Deccan in consideration of such returns, and failed in consequence, and I see no reason to expect a different result in Gujaràt.
11. In conclusion, I am sorry to observe the facility with which you have adopted Mr. Pedder's suggestions.

Mr. Rogers may have been guilty of some errors of judgment as well as of execution when he was connected with the survey, but he was certainly right in his principle of assessing Government bagait land, as is proved by the absence of all complaint against it. I request, therefore, no deviation may be made from the system adopted by him in the Jetalpur District without previous reference to me.
12. After taking a copy of Captain Francis' memorandum be so good as to return it to this office for record.

I have, \&c.,<br>S. MANSFIELD,<br>Revenue Commissioner, N.D.

Khándesh District, Camp Erandol, $\}$ 19th November 1860.

No. 1271 or 1860.
To
S. MANSFIELD, Esquire,

Revenue Commissioner, N.D.
Camp Asúrva, 27th December 1860.
Sir,
I have the honour to submit for the consideration of Government a report, No. 128, dated 14th instant, from the Superintendent of the Revenue Survey and Assessment in this province containing proposals for the revision of assess-
ment on the general principles of the revenue survey of the khalsa villages of the Daskroi Pargana in this collectorate, and to request that sanction for the experimental introduction of the rates hereinafter specified may be accorded at the earliest practicable date. The papers that have to be prepared in connection with the change of system are unavoidably of such a voluminous nature that, unless the calculations are commenced immediately, there is great fear that the two districts which it is proposed to settle in the course of the eeason, Daskroi and Parántij, will not be completed by the close of the revenue year.
2. Paragraphs 2 to 5 of Captain Prescott's letter containing details of the number and description of villages, their area and population; paragraphs 6 to 18 describing the varieties of soil, methods of cultivation, and the general features of the country; paragraphs 19 to 22 giving the revenue history of the district previous to, and paragraphs 23 to 29 that subsequent to the introduction of the British rule are extremely interesting and exbaustive of the several subjects of which they treat, and I should only unnecessarily prolong this report were I to do more than notice them in passing.
3. Paragraphs 30 to 39 contain valuable statistical returns, to which I would beg to call the particular attention of higher authority, as elucidating the condition of the agriculturul classes in the district within the last forty years. The general increase of population in the district is shown to have been a little above 70 per cent. and that of houses about $91 \frac{1}{2}$. I need, however, scarcely remind you that the figures in the latter case, from which Captain Prescott deduces an argument in favour of the increase in material comforts of the people, are not particularly trustworthy, as the numbers in each case must have depended greatly on the manner in which sheds and other tenements may have been counted as separate houses. The number of ploughs appears to have about kept pace with the increase in the population, but the average area cultivated by each plough has evidently been considerably contracted. Although this may partly be at. tributed to the substitution of money for grain rents, which is invariably followed by that of a more careful system of husbandry for the loose one prevalent when the cultivator feels certain of reaping an extra quantity of grain for every acre of extra land he cultivates with however little care and trouble and runs no risk of heavier demands than that at which the outturn of the season may determine those of the State upon his produce, I think a consideration of the fact of the great fall in the prices of agricultural produce fairly points to a diminution of profits as the true cause of the small average area now cultivated by each plough as compared with that of forty years ago. This is more apparent when the large increase in the same period in the population of Ahmedabad, which draws its supplies of agricultural produce chiefly from the surrounding districts, which must have had a tendency. to keep up prices beyond the level they would otherwise have maintained, is taken into account.
4. The total area of Government and alienated land in cultivation, according to the figures in paragraph 36 of the Superintendent's letter, do not correspond with that shown in the table accompanying the diagram. The discrepancy arises from the latter being calculated from the estimated bighás of the revenue returns not corresponding with the measurements of the survey, which latter include small pieces of waste measured into survey fields. The total area as ascertained by the old survey is about 1,360 acres in excess of that shown by the new. That there should be a discrepancy, cannot be wondered at when it is remembered that in the former the cultivated area only was measured and the waste estimated from the maps which were laid down by theodolite; but it appears to me that there is great cause to doubt the accuracy of the area under cultivation thius shown. The alienated land now under cultivation is ascertained to be about 33,750 acres out of a total of 42,200 . If we take 30,000 as the area of alienated land under cultivation at the period of the old survey, there would be left about 42,800 as that of the Government land. The average of the first five years entered in the diagram is 53,815 acres, which would show that there had been an increase of about 11,000 in cultivation in the period subsequent to the old survey, one of only six or seven years. The average for the last five years in the diagram is 56,174 , showing an increase in thirty-two years of only 2,360 acres, so that it appears highly improbable that the increase of 11,000 mentioned above should be a true one.
5. I have now to notice the rates of assessment proposed by the Superin. tendent in paragraphs 46 to 55 of his letter. 'I'he fact of a large inerease of population both in the district and in the large mart of Ahmedabad, amounting altogether to $34 \cdot 05$ per cent., having in the last thirty-two years led to an increase in the area under cultivation of only 4.38 per cent., together with the decrease in the value of agricultural produce, clearly points to a large increase in the supply of produce drawn from neighbouring foreign territories which could under a better system of revenue management that would have prompted agriculture have easily been supplied by our own. We have only to look at the returns of cultivation in Viramgám, which show an increase of over 100 per cent. in about the same period of time, in consequence chiefly of the light rates of assessment introduced at the same time that the 8 villages mentioned in the margin of Captain Prescott's 24th paragraph were settled (vide my letter as Settlement Officer to the Collector of Ahmedabad, No. 119, dated 20th January 1858) to feel assured that similar results would have attended a like reduction in the rates of assessment in the more favourably situated district round Almedabad.
6. The contrast again presented by the diagram as to the proportionate amount of cultivation and waste to total arable area in the Government and alienated lands respectively proves forcibly that the system which has operated so unfavourably in developing the resources of the former could not have been a good one. A glance at the dhára (or revenue usage) of the three villages given by the Superintendent suffices to show that the system was radically wrong from the tendency to tax capital and thus check the developinent of enterprize. There can be no doubt that the mere introduction of the survey system without any great reduction in the average rates of assessment will, by doing away with all the old almost unintelligible complications and equalizing the burden of the demands of the State, of itself suffice to remove all impediments and let the industry of the rayat have free course. I am afraid the idea expressed in the 42nd paragraph of Captain Prescott's letter, that the decline in prices of agricultural produce notwithstanding the favourableness of circumstances for their rise, may be traced to the increase of skill, capital and industry having produced larger proportional returns from the limited area under cultivation, is not founded upon fact, but that the true cause lies where I have pointed to it,-the largely increased supplies drawn from more distant territories which the misrule of Native Governments did not in former days allow to reach a market.
7. Captain Prescott proposes to divide the villages of the district for drycrop assessment into 6 classes, the maximum rate for the first of which- he fixes at Rs. 3-8 per acre. In this I beg to recommend socte modification, on the following grounds.
8. Probably within three years Ahmedabad will be the terminus of the railway connecting Gujarat with Bombay, and land in the villages immediately surrounding it will of course become more proportionately valuable as compared with that of those at a greater distance than it is even now, in consequence of the proximity of the Ahmedabad market. As it is, the value of land capable of producing the commonest cereals-jovari and bajri-becomes more valuable every half mile it approaches the town, in consequence of the increased facility for the sale of the kurab or stalks, for which there is an enormous demand as fodder for cattle. I propose, therefore, to fix the maximum rate for the villages immediately surrounding Ahmedabad and the railway terminus at Rs. 3-12, and, keeping the same number of classes as that proposed by the Superintendent, to reduce the maximum of each class according to its distance from that centre by 4 annas, so as to bring the lowest to Rs. 2-8 instead of Rs. 2-4. Other slight modifications in the grouping of villages according to position are also proposed, which will be seen by reference to Statement $X$ accompanying this letter.
9. The villages I propose to place, in the 1st class with a maximum rate of Rs. 3-12 are the first 20 in Captain Prescott's Statement D, amalgamated to form 4 with Rakhial, Dariápur, Asarva and Rifjpur, together with Mehmadahad Kokhra from his 1st class, and Bágfardos from his 2nd class. It will be seen from Statement $X$ that whereas ten years' collection from these villages according to the Superintendent's calculations come to Rs. 15, 292-1-6, and his proposed maximum rate of Rs. 3-8 would reduce the rental according to
present cultivation to Rs. 13,253-13-7, the maximum rate of Rs. 3-12 only raises the latter to Rs. 14,305-1-4, which is still nearly Rs. 1,000 below the collections specified.
10. Of the villages in Captain Prescott's 2nd class I propose to raise 8 to a maximum of IRs. 3-8-0 and include with them 11 assessed by him at that, so as oto form one class of 19 villages. The increase on the class in consequence of raising the maximum of the 8 villages is Rs. 820-11-1, and the decrease on the whole class below the ten years' average collections is Rs. 2,062-0-10.
11. Of the villages assessed by the Superintendent at a maximum rate of Rs. 3-0, I propose to raise 4 to Ks. 3-4, when these and 6 assessed by him at the latter rate will form my 3rd class. The increase in consequence will amount to Rs. 226-5-7, and the decrease on the class on ten years' collections to Rs. 371-15-3.
12. In my 4th class, to be assessed at a maximum of Rs. 3-0, I propose to include 7 villages placed by the Superintendent at Rs. $3-4$, and 8 assessed by him at Rs. 2-12, leaving 9 already assessed at Rs. 3-0 at the same rate. The result on the whole 24 villages will be an increase of Rs 514-13-5, and a decrease of Rs. 745-6-7, or a net decrease of Rs. 230-9-2. The decrease on ten years" average collections will be Rs. 4,387-11-9.
13. In my 5th class, to be assessed at a maximum of Rs. 2-12, I include 9 assessed by Captain Prescott at that rate, 20 assessed at Rs. 2-8, 4 at Rs. 3-4, 5 at Rs. 3-0, and 1 at Rs 2-4, altogether. 39 . The result will be a decrease of Rs. 1,042-12-2 and an increase of Rs. 2,440-8-2, or a net increase of Rs. 1,397-12 beyond Captain Prescott's' estimate. The decrease below ten years' collections will be Rs. 1,975-15-0. It is necessary to explain, with reference to the , village raised from Rs. 2-4 to this class, Sanoda, that Captain Prescott has overlooked the fact that though it is situated at a long distance from Ahmedabad it is near the large town of Degam, which has a good bazír. I have reduced the 4 villages assessed by him at Rs. 3-4 to this class, on account of their being situated on the opposite side of the river and at a considerable distance from Ahmedabad in the immediate neighbourhood of Jetalpur villages assessed at a maximum rate of Rs. 2-8.
14. In the 6th class, at a maximum of Rs. 2-8, are included 2 villages - of the Superintendent's at the same rate and 1 at Rs. 2-12. The result is an increase of Rs. 74-12-1 above Captain Prescott's estimate and a decrease below it of Rs. 26-9-4, or a net increase of Rs. 48-2-9. The decrease below ten years' everage collections will be Rs. 830-7:2.
15. The total difference that will result from the change in the maximum rates of assessment and of the classes of villages will be an increase of Rs. 5, 128-6-1 and a decrease of Rs. 1,814-12-1, or a net increase of Rs. 3,313-10. At the Superintendent's rates the decrease below the ten years' collections would be Rs. 13,928-12-2, and at those now proposed Rs. 10,615-2-2. If the waste, amounting to 24,242 acres, is brought into cultivation, there will be an increase of nearly Ra. 40,000. The assessment on the dry-crop lands in fempat 1996 to the existing rates having been Rs. $1,27,750-12-5$, there will be a present loss in revenue from this source of about Rs. 19,443-13-7, and there will still be a margin of about Rs, 20,000 left for an ultimate increase in revenue from the cultivation of waste lands after this loss has been made up.
16. There is a discrepancy between the area of dry-crop land under cultivation shown in the 23 rd column of Statement $C$ and that in the jamábandi statements for last year. "The latter sets it down at 85,848 bighás equal to only 50,498 acres, whereas the measured acres appear to be 49,883 , or 615 below those in the jamábandi statethents, so that as the survey acres include fallow lands and the jamábandi statements do not, it would appear that the diera or estimated bigha is really on an average less than the theoretical area of a bigha, instead of larger, as stated by the Superintendent in his 62nd paragraph.
17. Of the 2 inámi villages for which rates of assessment are proposed, Narol and Batva, I would retain the former at the rate mentioned by Captain Prescott, namely Rs. 3-4, and reduce the latter to Rs. 3-0. I have received
the letter referred to in paragraph 51 of the "Superintendent's report, and will forward it as soon as possible. It contains proposals for a change in the system of management favourable to the proprietors of the villages; but os the deeision on the question must turn mostly upon the effect the revision of assessment may have upon its revenues, I would not propose to delay the calculations based upon the new rates.
18. With regard to lands within the city of Ahmedabad now included in

No. 3564, dated 6th October 1860. what is called "Juni Choti Daskroi," I have to remark that the late Resolution of Government mentioned in the margin, which directs that the rights of the State to let out to others all alienated lands hable to the payment of quit-rent when under cultivation, when they are neither occupied for building purposes nor cultivated by their"owners, should be asserted and exercised, will oblige us to fix, rates of assessment upon the lands. As rates have not been settled by the Superintendent (paragraph 50 ) he will be communicated with on the subject, and the result reported hereafter. The rate of quit-rent on alienated and of bighoti on Government land is now the same, wiz., Rs. 3-4-0 the bigha, or about Rs. 5-8-4 the acre.
19. Taking into consideration the inferior facilities for raising rioe crops in this district to those possessed by Jetalpur, the maximum rate for which has been fixed at Rs. 10 on land capable of producing with certainty two or three crops in the season, i. e. riee and one or two subsequent crops, I think the maximum of Rs. 6 proposed by Captain Prescott, (which is the same as that in the Dholka Pargana), a fair one, and would recommend it for adoption.
20. Captain Prescott estimates the revenue derivable from the rice lands of the, district already under cultivation at the rate above mentioned at Rs. 29,494-7-5, which, when compared with Rs. 30,873-7-4, put down as the collections on the area under cultivation as ascertained by the survey according to. the average rate of assessment for ten years, shows a diminution of Rs. 1, 378-15-11. This method of calculation, however, is very apt to mislead as to the actual effect produced upon the existing revenue by the change of system, as you will be convinced when I state that the real effect of that chunge, as far as rice lands are concerned, will be to raise the assessment upon them by about Rs. 1,31,50 $;$ for the assessment derived last year from what was entered in the jamábandi statements as rice land under cultivation was but Rs. 16,352-7-0 and the area of that land was about 4,190 bighás, or 2,464 acres. The area in cultivation ascertained by the survey is $6,0: 34$ acres, or 3,570 in excess of what appears in the jumábandi statements. This excess, assessed at Rs. 2-0-11 the average drycrop assessment per acre according to Captain Prescott's proposed rates and Rs. 2-9-11, the average water rates as shown in paragraph 53 of his 7etter, would yield about Rs. 16,700, which would more than account for the difference between the existing and the survey assessments upon this species of land. The reason fur the great difference between the assessed and the measured areas is chiefly this. ln the 35 villages into which the bighoti rates fixed by panchaits were introduced about eight or nine years ago the principle of allowing to cultivators the benefit of improvements made by themselves wás of course carried out by the rates being fixed, whatever might be the description of crop, raised, and the natural consequence has been that large quantities of land classed by the pancháits as dry-crop are still enjoyed at dry-crop rates, although they have been converted into rice beds.
21. It becomes thus a matter for consideration whether those who have expended their capital and labour upon the improyement of their lands upon the faith of the introduction of a system of fixed payments are not entitled to a remission of the water rates, at all events for some portion of the period for which the suryey rates may be guaranteed. When the biyhoti rates were introduced, I believe some sort of guarantee was understood to have been given that they would not be disturbed for five years, and as that period has more than elapsed in all the villages settled, those who have improved their lands could not legally claim romission on that account; but I would respectfully beg to recommend that in all well authenticated cases in which it appears to the survey officers that a reasonable return for such improvements has not been received, they may be directed to grant remissions for longer or shorter periods on that account, acording to circumstances.
22. The reason given above in paragraph 20 for the discrepancy between the present area assessed as rice land and that ascertained by the survey measurewents is partly applicable also to the case of bágait lands. The area shown in the jamábandi statements of last year was 10,792 bighas equal to 6,348 acres whereas that entered in column 21 of Statement $C$ is 8,696 acres. The latter area, however, is only an approximation to the correct one, as the actual quantity can only be fixed by the settling officer on a minute examination of the capabjlities of each well. If we take 2,000 acres as the area to be assessed at garden rates beyond that now assessed at then, the introduction of the survey would operate as an increase of assessment at the average rate at which the Superintendent has "made his estimate of about Rs. 9,685 beyond that at present realized from what are assessed as garden lands. The assessment of these lands, according to last year's jamábandi statement, was Rs. 42,711-7-2, and Captain Prescott's estimated survey assessment on 2,348 acres more than what bore the former, is Rs. 42,097, so that his estimated average assessment falls considerably within the present average rates.
23. Taking this into consideration, together with the fact of the greater proportionate value of garden lands in the inmediate vicinity, of a large city like Ahmedabad over that of similar lands even at a few miles' distance in consequence of the great demand for vegetables and other garden produce, I would propose'the maximum rate for garden'lands' in 1 st and 2 nd class villages at Rs. 10, instead of Rs. 8-8, as proposed in Captain Prescott's 55th paragraph. In the remaining villages the maximum rates will be lowered on a consideration of distance from markets and other local circumstances.
24. As the results given in the 50th paragraph of the Superintendent's report do not by any means show the true amount of present loss of revenue and gain to the cultivator according to present assessments from the change of system, I have framed the following statement to ascertain the sum approximately :-

| $\begin{array}{ccccc}\text { Captain } \\ \text { lands } \\ \text { Prescott's estimated assessment on rice } \\ \text {... } & \ldots & \ldots & \text {... } & \text { Rs. } 29,494\end{array}$ | Rs. |
| :---: | :---: |
| Add net increase in consequence of raising the jiráít rates .. ... ... , 192 |  |
| Deduct full assessment on 3,570 acres, the excess in rice lands beyond that now assessed as rice... , 16,847 |  |
|  |  |  |
| Balance ... " 12,839 | 12,839 |
| Estimated assessment on 8,696 acres of garden <br> land at Rs. 5 the acre ... | 31,740 |
| Deduct full assessment on excess of 2,348 acres at the same rate ... ... ... , 11,740 |  |
| - . Balance ... 3 31,740 |  |
| Dry-crop Lands. |  |
| Assessment on lands classed as dry-crop by the survegnat the enhanced rates proposed ...Rs. 1,08,307 |  |
| Add dry-crop rates on the excess in rice lands ... " 7,476, |  |
|  |  |  |
| ${ }_{\text {at }} \mathrm{Rs}$. 2-4 per acre ... ... ... $>$ " ${ }^{5,283}$ |  |
| Total dry-crop ... , 1,21,966 | 1,21,066 |
| Total by survey, minus increase of assessment on account of excess in rice and garden lands ... ... ..Rs. 1,65,645 |  |
| Last year's assessment according to the jamibandi papers. „ 1,87,356 |  |
| Ten years' average collections * ... ... ... | $1,74,142$ <br> 1,781 |
| Survey settlement loss than current revenue | ,71 |
| Do. do. . collections | 8,497 |
| Estimated survey kamál at the rates now proposed | 2,41,870 |
| Margin for eventual ịncrease of revenue ..: | $\xrightarrow{76,225}$ |

25. In consequence of the imposition of high garden and rice land assessments upon the large quantity of land ascertained by the survey to be in excess of that now so assessed, the loss of revenue consequent upon the reduction of rates will be to a considerable extent made up, and the account will probably stand nearly as follows :-
 for the last ten years, of $\boldsymbol{R}^{2} .7,331$. It is as well to explain here, as the Supertendent has not done so clearly, that the figures in column 28 of his Statement $D$ exceed those in columa 29 (the average collections just mentioned), because the items which compose the former, (which are those on which the decrease consequent on the lowering of the dry-crop rates shown for the several classes of villages above mentioned is founded), are calculated upot the cultivated area as ascertained by the survey at the average rate of assessment for the past ten years.
26. Until Government may come to a decision on the subject of water rates to be levied for the use of water belonging to the State in alienated lands it will be necessary to adopt the plan of separate water rates, as suggested in the 58th paragraph of Captain Prescott's letter.
4 27. ThemSuperintendent has omitted to mention the rates of ssessment that will have to be imposed for the use of water from rivers or from uubuilt (kutcha) wells for raising irrigated crops. For the former I would beg to propose Rs. 12 per water-bag drawn from the Sábarmati, and Rs. 8 for each drawn from the Khári River, as in Jetalpur. For unbuilt wells. a maximum of Rs. 8 per water-bag for 1st class villages, lowered half a rupee for each class in descent, would probably be fair. These rates would cover the expenses incurred in digging and constructing these temporary irrigational works, and not give those using them an unfair advantage, over the holders of lands under permanent wells and assessed at garden rates, in competing with them in the market, by the cheaper rate at which they would otherwise be able to raise and sell their produce. The Superintendent has not given the number of these wells, and I can form no estimate of the probable revenue to be derived from this source from the annual revenue papers, in consequence of the prevalence of the crop rate. From two to three thousand rupees may probably, however, be added to the estimates on this account:
27. I can see no adequate reason for entertaining the suggestion made in ${ }^{*}$ Captain Prescott's 43rd paragraph to lower the rates of assessment he has proposed by 4 anuas all round. The figures given in his 48 th paragraph show that his proposals would give an average reduction of above: 5 aninas 10 pies an acre on dry-erop soils throughout the district, for which in consideration of the ruling high prices of agricultural produce of late years I tan see no necessity. The opening up of communication with Bombay by rail will tend to keep up prices, which, having evidently risen in consequence of the immense influx of silver into the country and the development of native industry in numberless ways, will not fall to any great extent until the latter becomes slack, or the flow of the precious metal to the East is stopped. As matters now stand, there does not appear much probability of the latter event, and there is scarcely a pcssibility of the former.
28. The 63rd and following paragraphs of the report under review contain - professional and other details, upon which it is unnecessary for me to enlarge.
29. In conclusion, I have the honour again to solicit sanction for the introduction of the proposed rates of assessment at the earliest possible date, for the reasons urged in the ist paragraph of this letter.

No. 1282 or 1860.
From
Thr COLLECTOR of AHMEDABAD;
To
W. G. PEDDER, Esquire,
Assistant Settlement Officer in Gujarát.

Ahmedabad Collector's Camp Asárva,
31st December 1860.
Sir,
In accordance with instructions conveyed in a telegram from the Revenue Commissioner, N. D., I have the honour to forward a list of the villages in the Daskroi Pargana with the dry-crop rates I have proposed for them, in substitution for those contained in Captain Prescott's letter No. 128 of the 14th instant, and to authorize you to commence the calculation of assessments accordingly. The water rates in rice lands will be the same as those proposed by the Superintendent. The maximûm rate for garden land will be raised from Rs. 8-8-0 to Rs. 10 for the 1st and 2ad class villages, and may be reduced in the remaining classes on a consideration of local circumstances, but I would prefer consulting yourself and Captain Prescott before fixing the particular rates for each class.

I have, \&c.,
A. ROGERS, Collector of Ahmedabad.

STATEMENTX.
1

STATEMENT X.
Statement showing the Reclassification of Villages and the modified Dry.Crop Rates proposed by the Collector.

61-898




# Revente Diparturent. 

The Honovrabre A. D. ROBERTSON, Secretary to Government, Bumbay.

Mátherán, 6th June 1864.

Sir,
On the 21st April last I submitted a report (No. 1160) on the revision of the assessment in Jetalpur. I have now the honour to communicate to you, for the information of Government, the result of Captain Prescott's proceedings in introducing survey rates into the neighbouring pargana of Ahmedabad Daskroi.
2. Like that of Jetalpur; the "report of the Daskroi settlement was undisposed of when I took charge of this office. It
-No. 128 of 14th Decejpber 1860.
+On the 14th December 1860. was originally forwarded + by Captain Prescott to Mr. Rogers, then Collector of Ahmedabad, whe sent it on to my predecessor on the 27 th of December 1860. There was some difference of opinion between Captain Prescott and Mr. Rogeris as to the proper maximum rates. Mr. Mansfield concurred in the views of the Collector, and, in authorising the revision in accordance with Mr. Rogers' proposals, called for an estimate of the financial result of the modified settlement.
$\ddagger$ Addressed to Mr. Reid, Collector of Ahmedabad. Captain Prescott's $\ddagger$ reply, though dated 16th January 1862, was not submitted by the Acting Collector till the 3rd May 1862. Mr. Hope made no remarks; and as in many points the circumstances of Daskroi resembled those of the adjacent pargana of Jetalpur,the doubts regarding the bhátha and garden lands being the same, and the classification of both districts having been mismanaged during the incumbency of the former Superintendent,-I delayed applyCaptain A. Cowper, R.E. ing for the final sanction of Government until I had an ( pportunity of visiting the táluka and until I could report on Jetalpur.
3. The accompanying §report from Captain Prescott contains much in-

Appendix A.
§No. 128, dated 14th December 1800. See paragraphs 2 to 28. teresting information respecting the district. It gives (a) details of the number and description of villages, their area' and population; (b) the varieties of soil, country ; and (c) the revenhe of caltion, and he go the introduction of the British rule.
4. Captain Prescott has also taken much trouble in preparing a statistical

In regard to population, means of husbandry, revenue,
 when it was surveyed by Captain Cruickshank. This table accompanies the report. Captain Prescutt's observations regarding it are. to be found in paragraphs 32 . to 39 .
5. Mr. Rogers contends that the figures regarding the number of houses (stated to have. increased about $91 \frac{1}{2}$ per-cent.), from which Captain Prescott deduces an argument in favour of an increase in the material comforts of the people, are not particularly trustworthy, as the numbers must have depended greatly upon the manner in which sheds and other tenements were counted as separate houses. There can, however, be no doubt but that the district has made great progress.
6. The revision of assessment took place in 1860-61. The villages were grouped into six classes, with dry-crop rates, as follows, giving an average rate for the pargana of Rs. 2-0-11 $\frac{1}{2}$ against Rs. 2-6-92 ${ }^{\frac{2}{3}}$ under the old system :-

|  |  | Rs. ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1st Class | ... | ... 38 |  | ... 32 | villages. |
| 2nd do | ... | 34 | 0 | ... 26 | do. |
| Erd do | ... | 30 | 0 | ... 18 | do. |
| 4th do | ... | 212 | 0 | ... 19 | do. |
| 5th do | ... | 28 | 0 | ... 21 | do. |
| Eth do | $\ldots$ | 24 | - | ... 3 | do. |

Mr. Rogers did not agree with Captain Prescott. He argued that the facilities of communication by railway had not been taken into consideration in preparing his scale, and suggested that the maximum in each class be raised by Appendix B. four annas. Other slight modifications were also
posed by Mr. Rogers in the grouping of villages.
7. For rice lands Captain Prescott proposed Rs. 6 per acre, the maximum rate in the Dholka Pargana, and this was concurred in by. Mr. Rogers.
8. As to garden lands, Mr. Rogers raised Captain Prescott's rate (Rs. 8-8) to Rs. 10 for the 1st and 2nd class villages, in consideration of the great value of such lands close to a large city. The maxmum rates in the other villages were left to be regulated with reference to distance from markets and other local circumstances.
9. The result of the above alterations is thus described by Captain Prescott Letter No. 4, dated 16th in his second report, the statement forwarded with January 1862. which is annexed as Appendix C :-
Revenue according to the late system from Government Cultivated Lands for the year Samvat 1917, A.D. 1860-61.

| -Rice Lands, | Dry-crop Lands. | Gardon Lands. | Total. | Average Colleations for ten years from St. 1905 to St. 1914. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{rrr} \text { Rs. } & \text { a. } & \text { p. } \\ 18,915 & 8 & 0 \end{array}$ | $\begin{array}{ccc}\text { Rs. } & \text { a. } & \text { p. } \\ 1,42,959 & 2 & 10\end{array}$ | $\begin{array}{ccc}\text { Rs. } & \text { a. } & \text { p. } \\ 89,094 & 10 & 4\end{array}$ | $\begin{array}{ccc}\text { Rs. } & \text { a. } & \text { p. } \\ 2,00,969 & 5 & 2\end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 1,74,142 & \mathbf{3} & \mathbf{8} \end{array}$ |

Assessment of Government Cultivated Lands, according to the Survey Settlement, for Samvat 1917, A.D. 1860-61.

| Rice Landa. | Dry-orop Lands. | Garden Lánds. | Total. |
| :---: | :---: | :---: | :---: |
| Rs. at p. | Re. a. p. | Rs. a. p. | Rs. a. p. |
| 28,326 '2 0 | 1,23,536 $\quad 0 \quad 0$ | 32,363 12 . 0 | 1,85,225 140 |

Survey Assessment less or more than the Assessment under the late system.


Survey Assessment of Waste Government Lands.


| Remission on Khattay on which the Survey Asscesement exceeded the Assessment according to the late aystem. | Remisaion on account of failare of Cropa. | Total Remistiong. | Produce of Unameseed Landis sold by Auotion. | Nagdi Upaj males of Cirase, Wood, Fruit, to. |
| :---: | :---: | :---: | :---: | :---: |
| Rs. a. p. | Rs. R. p. | Rs. 8. p. | Rs. at p. | Re. a. p. |
| $17,093 \quad 3$ | $812 \quad 15 \quad 5$ | 17,406 81 | 2,866 111 | $15,888 \quad 12 \quad 6^{\prime}$ |

Some explanation of the figures here given is necessary :-
1st.-The increase (Rs. 10,410-10) in the assessment of rice lands arises from two causes-first, that rice land irrigated from wells, and producing second crops of wheat, barley, \&c., has by the survey been classified and assessed as rice, whereas under the late system it was called garden land, and its assessment has consequently been shown in column 6 of the accompanying statement ; secondly, that a good deal of land converted into rice since the bighoti settlement of Messra. Jackson and Fawcett, and which has hitherto paid only dry-crop assessment, has now by the survey been classified and assessed as rice.
$2 n d$. -In certain villages there were cesses, such as plough cess, the revenue from which, as they are paid by each cultivator on his entire holding, cannot be distributed among the different kinds of lands in his occupation. In some cases these cesses were paid from the produce of alienated as well as from that of Government lands. In order to make the figures in column 7 of the statement tally with, those given in the vasulbaki patraks as the revenue of Government lands according to the late system, it was necessary to enter this item of revenue in column 5, and the assessment of dry-crop lands is thus shown as being larger than it really was under the late system. The amount of these cesses (Rs. 363-8-4) which falls upon alienated lands, on an average of five years, has been separately calculated and imposed as a permanent quitrent upon those lands. This amount must, therefore, be deducted from the total decrease of assessment caused by the settlement. And it must be understood that although the balance (Rs. 2,552-1-6) is shown as part of the assessment of dry-crop lands, yet a portion of it properly belongs to that of garden or rice lands.
10. It will be seen that the collections for 1860-61, according to the revised rates, fall short of the amount which would have been realized had the old system been in force in that year; but the contrast with the average collections of the preceding ten years results in an increase in favour of the revision, the difference being Rs. 11,083-10-9.
11. The assessment of the total culturable area of the district amounts to

See paragraphs 17 and 22 below. Rs. 2,45,131-4, exclusive of the proceeds from grass, fruit, \&c., annually sold by auction. The revenue will be further improved by the assessment on lands in and around the city of Ahmedabad, and by a revision of the bhátha lands in the Sábarmati,
12. It was doubted at the time whether the rates adopted under Mr.

Dholákaa.
Indrora.
Usmanábad.
Sábáspar. Rogers' advice in the 4 outlying villages marginally noted would work properly. Captain Prescott considered these rates too high, owing to the inferiority of the soil of these villages, their distance from the Ahmedabad market, and to the circumstance of their inhabitants being, for the most part, ignorant coolies hitherto accustomed to the payment of a light plough
${ }^{-}$Dated 13 th April last. tax. I am, however, glad to be able to state that the villages are prosperous. By the last *accounts I learn that of the 475 acres of culturable waste unoccupied in these villages in 1860-61, 351 acres, or 75 per cent., have been already taken up. Better proof than this of the fairness of the rates could not be desired.
13. Captain Prescott reports that the rayats of the district were exceedingly well satisfied with the new rates, and that, except in a few instances, all of them agreed to retain their holdings under the new settlement.
1 14. There are three points in the Appendix $A$ which seem to call for notice in this report-

Paragraph 3 of Captain Prescott's report.
II. The lands within the city walls of Ahmedabad entered in the Paragraph 3 of Captain accounts as a distinct village under the name of Prescott's report. "Juni Choti Daskroi."
III. The incorporation of the 15 so-called villages in the immediate Paragraph ' 4 of Captwin neighbourhood of the city without any resident Prescott's report. population.
15. Narole is held by Keshsorao Nursing, the eldest son of the late Nurso Punt, to whom it was granted in 1840 . The survey

In inám for three lives, $G$. L. No. 1776, dated 30th May 1840.
I. The inámi and vazífa villages of Narole and Batra. of the village was undertaken at the express desire of the inámdăr. whe has promised to abide by the rates fixed by the Superintendent; the maximum is Rs. 3-4 per acre.
16. Regarding Batva, a settlement has been effected in accordance with the instructions of Government, and I beg to refer to the correspondence ending with your No. 1663, dated 30th April last.
17. The lands within the city walls of Ahmedabad are now being carefully Government Resolution No. measured and recorded. Proposals for their assess3044, dated 9th September ment, which will have to be fixed on principles different 1863. from those observed in respect to lands valuable only for cultivation, will be submitted in due course.
18. On the 10th November 1860 Captain Prescott submitted a recommendation for reducing the number of the so-called villages around Ahmedabad, and it was sanctioned by Mr. Mansfield. Subsequently, on the 11th April 1861, however, Mr. Mansfield cancelled his order, on the ground that it had caused great dissatisfaction. I think that the amalgamation proposed by Captain Prescott required modification; but a part of his proposals might have been adopted with great advantage without causing any reasonable dissatisfaction. On this subject a separate report will be submitted.

No. 2980, suggesting a separate rate of assessment for lands outside the city walls of Ahmedabad.
19. While on the subject of the village lands in and near Ahmedabad I would solicit attention to my letter dated 12th October 1863, which remains still unreplied to.
20. In conclusion, $I$ beg to suggest that the present ratgs, which were authorized by Mr. Mansfield in anticipation of thé sanction of Government, be confirmed. I believe that the classification is now sufficiently correct, and there are not the samé reasons, as in. Jetalpur, for limiting the guarantee to a short period. It is true the rates are not so high as they would have been had the revision taken place within the last two years, but they are high enough when compared with the assessment of the adjoining districts of Dholka, Viramgam and Jetalpur, surveyed only a few years before. I may remark that whatever sacrifices were made at the time of settlement have been already compensated for by the extension of cultivation and the consequent increase of revenue, and I am of opinion, therefore, that a guarantee for a long period may be given. It will be convenient if the term of the guarantee be so fixed that the revision will take place at the same time as the revision of Dholka, and I would therefore recommend that it be given till the close of 1886-87.
21. This guaranjee will of course not extend to the lands outside the city Fide paragraph 19 abote. of Ahmedabad, for the assessment of which I have submitted separate proposals.
22. There will be a further increase to the revenue from the settlement of

Vide paragheph 9 of my letter No. 1160, dated 21 at April 1864,
-These will be found contained in his. the rents on lands known as bhátha abjoining rivers, irrigated by water raised from those rivers. These lands have been classified again, and a report thereon will be forwarded as soon as I am placed in possession of "Captain Prescott's views. To these also the present guarantee will not be applicable.
23. Daskroi contains one village (Kubadthal) held on the narvadari tenure. A report on the settlement of this village was made to Government on the 26th February 1863, No. 521; a reply has not yet been received.

I have, \&c.,<br>B. H. ELLIS, Revenue Commissioner, N. D.

## APPENDIX A.

No. 128 of 1860.

## From

Captan C. J. PRESCOTT,
Superintendent, Revenue Survey and Assessment, Gujarát; To *
A. ROGERS, Esquire,

Collector of Ahmedabad.
Superintendent's Ofice, Camp Kaira, 14th December 1860.

Sir,
I do myself the honour of submitting for transmission to the Revenue Commissioner, N. D., with any remarks which you may see fit to pass upon them, *proposals for the revision of assessment in accordance with the principles of the revenue survey in the pargana of Daskroi in your collectorate. Difficulties, upon which it is unnecessary to enlarge, have prevented my submitting this report at an earlier period; but as you are aware that I am precluded from commencing the calculation of the rates until the receipt of the Revenue Commissioner's sanction to my proposals, I am sure that you will pardon my requesting you to forward this letter and its accompaniments without delay, since the prospect of my being able to introduce the revised rates this season into Parantij depends entirely upon the Daskroi "jamábrandi" being completed early in the season.
2. The pargana of Daskroi in form is nearly an equilateral triangle,

Boundaries and extent of having the base to the south. It extends from the pargana. Uvarsad in the north to Batva in the south about 22 miles, and from Sunathal in the west to Chandial in the east about 25. It is bounded on the north-west and north by the Kadi, and on the north-east by the Degám parganas of His Highness the Gaikwar, on the east by the Kaira Zilla, on the south by the pargana of Jetalpur, and on the west by that of

Superficial area. Dholka. Its superficial area (exclusive of the space contained within the walls of the city of Ahmedabad, square miles 2.66 , acres 1,704 ) is square miles $291 \cdot 24$, acres 186,392 , and its
population (exclusive of 119,368 souls resident within the walls' of Ahmedabad) is estimated at 88,192 , which gives an average of $302 \cdot 80$ souls per square mile.
3. The whole number of villages shown in the public accounts as contained within the pargana is 134-120 sarkári (of which one, Juni Choti Daskroi, consists of lands cultivated
nd has consequently been excluded from the accomNamber of villagen. panying statements) and 14 alienated. The following is a list of the alienated villages, of their tenures, and estimated population :-


The superficial area of these 14 alienated villages is square miles $47 \cdot 87$, and their estimated population_-deducting Juni Choti Daskroi, which is within the walls of Ahmedabad.
4. Of the 119 Government villages 15 have no resident population. These

Government villages. are mostly in the immediate neighbourhood of the city, and their cultivators reside either in Ahmedabad or in other villages. As will be noticed below, it is proposed (as detailed in my 70th paragraph) to include the lands of several of these uninhabited villages within the limits of one large one, and thus to lessen the number of villages shown in the accounts. Five villages are separated from the body of the pargana, viz., Sábáspur, within the limits of the Kadi district, Indrora, Dholakua, and Sanoda, within those of His Highness the Gailkwar's pargana of Degám, and Geratpur, situated within the Jetalpur Pargana. Four villages belonging to His Highness the Gaikwar (Katwara, Baora, Bilasia, and Nubhoi) are within the limits of Daskroi. The superficial area of the 119 Government villages is
Superficial area of Government villages. square miles $243 \cdot 37$, acres 155,761, and the details of these figures are as follows:-


[^2]the Kanbi castes, appears to be good. The villages, particularly those in which
Condition of the people. the bulk of the residents are Kanbis. contain many substantial tiled houses two stories high, and these people appear to possess considerable property in household utensils, ornaments, \&c. and the same may be said in a somewhat less degree of the villages inhabited by a mixed population of Rájputs, Kanhis, \&c. The Koli villages are, however, poor, their houses mean and uncomfortable, and their cultivation slovenly. I have
Principal agricnltural castes. shown in columns 5 and 8 of the comparative statement marked C the custe of which the bulk of the population of each village was composed at the time of the late survey and that of which it now consists.
6. Three rivers flow through the pargana from north-east to south-west. Rivers. The Meshva passes through the extreme south-east corner of the pargana between the villages of Kua and Chandial. About five miles to the westward is the Khári, and again at a distance varying from four to nine miles to the westurard of the Khári is the Sábarmati, which, entering the pargana at the village of Ráesan in the north-east, and emerging from it at. Piplod in the south-west, divides it into two tolerably equal portions. None of these streams are navigable.
7. The pargana is generally level, or very gently undulating, but to the General appearance of the eastward and southward are a few low hills. The portion country. east of the Sábarmati is tolerably well wooded, especially that tract which extends north-east and south-east of Ahmedabad as far as the Khári, in which fine mango, tamarind, banyan, raen, lim, and mabura trees abound. To the west of the river the country is generally open, with comparatively few trees, and this portion of the pargana appears to be somewhat less productive in point of soil and climate than that situated east of the Sibarmati, and it is somewhat curious that in the Ahmedabad bazar the prices of various kinds of grain are slightly lower if brought from the westward of the river than if imported from the east.
8. In a compact district of the limited size of that of Daskroi, and presenting Climate. only very inconsiderable irregularities of surface, the variations of climate can be but very trifling. The

| Years. | Inches. | Centa, | Number of days in $\xrightarrow{\text { Which }}$ Rain fell. |
| :---: | :---: | :---: | :---: |
| A. D. 1853 ... | 40 | 64 | 26 |
| , 1854... | 33 | 58 | 43 |
| , $1855 .$. | 40 | - 71 | 51 |
| " 1856 ... | 50 | 31 | 49 |
| " 1857 ... | 47 | 85 | 42 |
| " 1858 .. | 20 | 15 | 64 |
| ., $1859 . .$. | 27 | 23 | 46 |
| $\ldots 1860 \ldots$ | 26 | :2 | 44 | number of inches of rain which has fallen yearly in Ahmedabad for the last eight years is given in the margin, the average being 35.87 inches. It is said that the rainfall is generally somewhat less in the villages westward of the river than in those to the east of it, which appears probable, as the greater number of trees in the eastern portion of the district must have a tendency to attract the rain. But the difference, if any exists, is very slight.

9. There are no made-roads in Daskroi, except those leading from the

Roads. city of Ahmedabad to the cantonment. The unmade roads throughout the district are during the fair season deep in sand and very heavy for carts, but a little rain renders them more compact, and they have the advantage of being generally passable throug'out the

Fords. monsoon, except temporarily during very heavy rains. The Sabarmati is fordable for men and horses in many places during the dry season, and in some for carts, but the principal fords from Ahmedabad are for the northern road at the Sáhibág and for the western opposite the Khánpur Gate. Both these fords are difficult for carts, owing to the deep sand.

[^3]from the presence of sand in a greater or less proportion,) from being capable of

> Gorádu. producing only scanty crops of the commonest cereals to soil in any part of India. It differs from the káli or black cotton soil of more southern districts, especially in its powep of retaining moisture being far inferior to that of the latter, and thus almost all the crops which are raised in it without artificial irrigation are kharif, and reaped immediately after the monsoon, whereas good black land often produces rabi crops of wheat, jovári, \&c., as well as of cotton without irrigation. It requires also frequent and copious manuring to prevent its productive power from becoming exhausted, and thus from its demanding a grenter amount of labour and capital to elicit its full capabilities, it must, on the whole, be considered inferior to black soil. But to skilful and assiduous husbandry it yields Yeturns inferior to none, and I may remark that this renders it extremely desirable so to frame, if possible, the settlement of Government demands as that a higher proportionate rate of profit may be returned to greater skill and industry in agriculture, and to fresh applications of labour and capital to the land. That such a result may be attained by a judicious settlement I confidently anticipate, first, because the greater requisite for improved production (water for artificial irrigation) may be everywhere obtained with certainty by sinking wells to a depth of from twenty to sixty feet; and secondly, because a certain market for agricultural produce already exists in the centre of the pargana in the large city and cantonment of Ahmedabad, and because it may be confidently expected that as soon as the railway is completed, which I trust will be the case within a few years, a large export trade in the mure valuable products will spring up.
11. The most fertile and valuable soil of any is the bhatha, found in DasBhátha. kroi, almost exclusively in villages situated upon the Sabarmativ to the south of Ahmedabad. It is a stratified soil of the nature of goridu, and may be divided into two classes - the permanent bhatha, which has been formed by the old channel of the river being filled up by alluvial deposits of mould, and consequently abandoned by the stream, and the changing, which consists of deposits of earth left by the annual floods of the monsocn overflowing the spaces between the usual channel of the river and its high banks, which is liable to be either washed away by the next year's freshes or ruined by being covered with sand. The former kind has been divided, like other lands, into arable survey numbers; the latter must be sold annually by auction as khurába. Both kinds of land, owing to their low situation, retain sufficient moisture to produce excellent rabi crops without irrigation) But as sweet water can always be obtained at a depth of from five to fifteen feet by simply digging, these lands are nearly always irrigated, and then produce magnificent crops, especially of sugarcane. Their value may be shown by the fact that those situated near the city, which are annually sold by auction, not unfrequently realize Rs. 25 per bigha, or Rs. 43 per acre.

- 12. The regular black cotton soil is not met with in Daskroi There is, Eali Bhoi. however, a tract of besar or partially black soil situated westward of the river to the north-west of Ahmed-
abad. A. great portion of this tract forms valuable grass lands.

13. There is in Daskroi no tract of rice-producing country like that to the Kiardan southward of Jetalpur. Rice is, however, cultivated to a greater or less extent in numerous villages in Daskroi.
It nowhere receives "baithu" water from dams erected in a river, as do many of
Nate.-" Baithu pani," the Jetalpur villages from the Khári, but when it does Water which flows through a not depend exclusively on the fall of rain, it is irrigated channel from its soarce with. out laboar, and remains on the ground. from wells or from small tanks dug for the purpose, and which mostly dry up soon after the monsoon.
14. The principal market for Daskroi is of course the city of Ahmedabad,
which, containing within the walls a pupulation of
Market.
and extensive cantonment, affords an unfailing demand for every description of
agricultural produce. There are, however, considerable báars in the villegos ef

Umvarsud, Sarkhej, and Wulad. The trade of the city of Ahmedabad is very Trade. considerable, more so probably than that of any other city in Western India except Bombay, and there is a very large trading population. I have, however, no statistics of its commerce, and I do not conceive that this directly affects the pargana of Daskroi, as I believe that the export trade in the agricultural produce of the district is very limited. The principal outlet is the extremely inconvenient port of Cambay, situated in foreign territory, and it is not profitable to export bulky commodities for which there is so large a demand within the district itself. When the railway is completed, as I have said, it may be confidently expected that a considerable export trade will be created by increased facilities for communication.
The growth of sugarcane may be increased almost indefinitely in Daskroi if its requisites-capital and facilities for export-are supplied, and it is said that the soil of the district generally is eminently favourable for the production of indigo, which is now scarcely grown at all, though it was once extensively cultivated.
15. The principal products of the district, and their various modes of cultit Principal products. vation, will be found so fully described in the 29th and following paragraphs of Lieutenant Cruikshank's report upon Daskroi-Ahmedabad, dated in 1825-that I nèed not enlarge upon them $D_{\text {ry }}$ Crops. here. The following are the principal dry crops; the letter K signifies a kharif or monsoon crop, R a rabi or cold-weather, and H a hari or hot-weather crop :-

| $K$.-Bajri alone, or with a palu crop. | R.-Gram. |
| :---: | :---: |
| $K$.-Jovári ditto. | $\boldsymbol{R}$.-Castor-oil. |
| K.-Kodra. | K.-Tul. |
| K.-Bavta. | $\boldsymbol{E}$.-Tur. |

Cotton is very little cultivated, except near Ahmedabad, where the plant is a biennial or triennial, differing from the cotton grown in the black soil to the southward, where it is an annual. In the villages immediately surrounding Ahmedabad, bajiri and jovar with palu are grown extensively, not for the grain, but to be cut green and sold in the city as fodder for the cattle, and are said to be worth Rs. 40 per.acre, with a very trifling expense in cultivation.


Vegetables are also grown extensively near the city, and are highly remunerative. A crop of sugarcane occupies the land for two years.
17. The methods of frigation in use in Daskroi may be divided into Irrigation. - two classes-those intended merely to secure a kharif crop of rice, and those intended to raise a second or bagait crop. The first method is from tanks, which are usually merely small

Rice irrigation. excavations near the rice fields, in which the water collects during the monsoon and dries up immediately afterwards, and.from which it is sometimes conveyed into the rice land by means of a pat, but more usually is lifted by a jilu or by bullocks. The construction of such small tanks should be encouraged, as they are very useful, both in saving the crop when the fall of rain is temporarily deficient, and in enabling the cultivator to raise a superior description of rice. The only large tank under which any extent of irrigated rice is usually grown is the Chundola, situated near the Roza of Sháh Alum, about two miles to the southward of Ahmedabad. This tank is in area about 180 acres, and a considerable extent of rice land used to be irrigated from it by means of "páts". It has, however, been suffered to fill up, and its supply of water has been interrupted, so that this year it is nearly dry, and almost all the rice land under it is waste. Rice lands are also irrigated from wells, and sometimes from dhekudis, in which cases a second ctop of whear or barley, \&c., can be raised after the rice.
18. Bágait irrigation is carried on by means either of wells or of dheku-

Bagait irrigation. . dis, which are places like a segment of a well made in * the bank of a river, and in which the river water, which it is often necessary to convey into them by means of channels dug in the sandy bed of the river, is lifted by a kos worked by bullocks just as in a well. In bhátha lands abundant water can often be obtained from kutcha wells, which are merely holes dug in the ground, and which cost nothing beyond the labour of digging or of clearing them out at the beginning of the season, and a rupee or two for the rough wooden frame upon which the kos is worked:
19. It is not necessary for me to dwell upon the revenue history of Daskroi previous to the introduction of British rule.

Revenue history previous to British rala. Before the Mahopnedan conquest of Gujarat ,most villages appear to have paid their revenue, whether directly to the Anhilvara sovereign or to any tributary chieftain, in the shape

## Rajput rule.

 of a certain fixed proportion of the actual produce of cultivated lands. It seems likely, however, that even in early times a fixed money payment, according to the quantity of land cultivated, was imposed in lieu of the produce rent upon certain more valuable crops, such as sugarcane, the produce of which was not easily susceptible of division, and also that extra money cesses on ploughs, castes, \&c., were imposed upon theRule of Viceroys from Delhi, succeeded by Sultáns of Ahmedabad.
population to meet temporary requirements. After the Musalmán conquest of Gujarát, the Government managed and levied revenue from the villages either directly or indirectly. In the districts furthest removed from the seats of power, and in which consequently the authority of Government was weakened by distance, the Rajput or Koli chiefs were permitted under the name of tálukdars to retain possession of their estates on payment of a tribute, or in other cases, as in that of the Dholka Casbatis, powerful Musalmans, br others not originally the chiefs of the villages, were granted maháls upon lease. But in districts more immediately exposed to the power of the Government, the Rajput chieftains were only permitted to retain as private estates, under the name of " vanta," $a$ fourth part of the lands of their villages, the Government assuming the direct management of the remainder or "talpad." As might be expected in the district immediately surrounding Ahmedabad, this was universally the case in Daskroi, in which there are no tálukdári or mehvasì villages whatever. But this change probably made little difference to the cultivators of the talpad lands, except that it isolikely that the money cesses were heavier and more frequent than before, as the bulk of the land revenue still seems to have been levjed upon the bhágbatai system.
20. When the avarice and fanaticism of the last sultáns of Ahmedabad had rendered the conquest of their kingdom easy to the Emperor Akbár, the vazir of that mosarch, Raja Todar Mal, made a revenue (A.D. 1576) survey of the more peaceful portions of Gujarat, including Daskroi, and a settlement of the Government demands on

Rule of Subhedars from
Delhi. Delhi.

Survey of Raja Todar Mal. what, as far as I can ascertain, appear to haye been the following principles. The lands were measured by bighás and divided into fields, which fields were again distributed into classes according to their relative fertility, which was ascertained by a careful inquiry into the actual produce of different kinds of land. One-third of the average produce being then fixed as the share of the State, the money value of this share, ascertained by an average of prioes fur nineteen years, was imposed as a bighoti assessment, the settlement being originally, I believe, annual and upon the crop, but afterwards fixed upon the field for ten years. If any cultivator thought the money assessment too heavy, he might elect to pay a third share of his produce by actual division, and this provision must have had the effect of a remissiof of the Government demands in years of scarcity. This system of revenue-managenent is said to have remained in force for about one hundred years, or until the reign of Aurangzeb, and from the survey of Todar Mal doubtless dates the division of lands into fields, and its classification as "Aval," "Duyam," and "Soyam," which still obtain in Gujarat, as the latter distinction at least would hardly have been drawn as long as the bhagbatai system was in fall operation.
21. When in A.D. 1755 the Maríthds established their power in Gujarát by the capture of Ahmedabad, the revenues of Daskroi appear to have been divided, like the city, between the Peshwa and the Gaikwár. Of the 120 Government villages now comprised within the pargana of Daskroi, 58 were in the 'Gaikwar's and 55 in the Peshwa's share, 7 new' villages having being since' founded. But the revenue system of both was the same. They farmed out the villages, either several at once, to a mere speculator unconnected with them, or singly to the patels or to some influential cultivator. The farmers of districts, however, seern to have managed individual villages through the patels, and these levied the whole amount they were required to pay as revenue from the cultivators as they found mpst convenient in each instance. Hence arose that extraordinary complexity of tenures and systems of revenue management which was found to exist at the introduction of. British rule, and which is thus described by Captain Cruickshank in the 38th paragraph of his report:-
"With the exception of the rice villages, in which some uniformity existed in the quantity taken as the Government share, no 2 villages could be said to conform to exact similarity of assessment. The common practice in those after the bhágbatái mode was to levy as the Government share one-half or two-fifths of the kharif, one-third or one-fourth of the rabi, and one-fourth or one-fifth of the hari, crop, while the dry-grain lands in the same village would be subject to a light bighoti, and further money payments exacted under a variety of cesses. In the bighoti villages existed an understood classification of the lands under aval, duyam, and soyam of the grand divisions of soil, the gorádu, bhátha and káli, distinguishing the irrigated and dry lands; and as the assessment had reference also to the description of produce, a method of taxation was in these prosecuted of scope sufficient to embrace every variety both of soil and crop. For awal land producing bájri and other dry grains the bighoti was about 4 or 5 rupees; for duyam, 2 or 3; for soyam, one or two per bigha. When after-crops were raised by means of wells, from 2 to 3 rupees per bigha were paid on these and a trifle less on hárị crops."
22. Two or three other points with regard to the Maratha system of revenue management may be noticed. As the farmers of refenue had a lease of their districts for only a few years, their only object was of course to extract as much monefy within this period as possible; and consequently they annually endeavoured to increase their gross demand on each village. When the managers of the village could not contrive to evade this increase, they seem to have usually met the demand, not by increasing the Government share of produce, the bighoti assessment, or any existing cessek, but sometimes by selling or mortgaging fields, on the condition that these should be exempt from eontributing to all existing demands upon the village revenue (from which practice originated the numerous unauthorised alienations of Government land, called "Vechánia" and "Gáyránia"), and sometimes by imposing fresh cesses, so that we occasionally find two or three distinct veras upon the same plough. The object of this was first that in case the gross pasessment of the village should be subsequently lowered, the last imposed cess was to be first: taken off, and also to afford an argument against any new farmer that the gross village revenue ought to be that alone which might be produced by the old village rates.

## 23. For the few years immediately succeeding the establishment of the <br> British rule. Honourable Company's rule at Ahmedabad in A. D.

 1817-18, the practice of farming out the villages by auction to contractors of any class was resorted to, in order to ascertain the actual revenues of each. This proved, however, to be exceedingly injurious, as the patels, naturally desirous of maintaining what they considered to be their hereditary right of engaging direct with Government for the revenue of their villages, and of retaining the management in their own hands, bid against mere speculators, who saw in the management of villages a new source of profit and influence, till the villages were run up to a sum far beyond what they were capable of realizing. It was consequently soon determined to assume the direct management in the generality of villages. in Daskroi, the alternative to thepractice of selling the management of villages by auction, that of settling with the patel or body of patels for the revenue in the gross, and leaving the interior management to them being in most cases rejected for apparently the following reasons :-First, the poverty of the patels themselves, owing to the long misgovernment of the Marạthás, which seemed to render it doubtful whether they would ever be able to raise the village from their de-
Vide Honouruble Mr. ELphinstone'g Minate on the Western Zilla north; of the Makhi, dated 6th Aprii' 1821. pressed condition ; next, the fear that the patels would abuse their power over the body of cultivators; and, lastly, the danger lest the interests of Government should suffer, there being little information available "upon which the Collector could decide what the capabilities of a yillage really were.
24. It was therefore determined to adopt the rayațvari system.' But in deciding on the manner in which each individual cultivator should discharge the Government demands upon his lands, it seems to have been considered that the "bhágbatai" system, popular on account of its antiquity, and theoretically fair both towards Government and the cultivator, was objectionable from its inconvenience and from its liability to collusion and fraud in a new country where the inexperience of European officials incapacitated them from an effectual supervision of an untrustworthy native agency. The system therefore generally adopted was that of a bighoti cash assessment upon crops, complicated in many villages with the bhágbatái, plough-tax, and khátạ́bandi systems, and generally varying according to the caste of the cultivator. This remained in force throughout the pargana, though alterations were frequently made at

Mr. Jackson.
In Sampat 1894-95 in 8 villages. Sir R. Arluthnot.
In Samvat 1899 ... $1 \quad$ "
1901 ... 3 " Mr. Faiwceti.
In Sampat $1906-7 \ldots 34$ \#

| $"$ | 1908 | $\ldots$ | 1 | $"$ |
| :---: | :---: | :---: | :---: | :---: |
| $"$ | 1909 | $\ldots$ | 9 | $"$ |
| $"$ | 1918 | $\cdots$ | 1 | $"$ |
|  | Total Village |  | $\frac{50}{2}$ |  | different times in different villages, until about twenty years ago, when the Collectors introduced a fixed bighoti assessment on fields, the , amount fixed by the valuation of panches in 50 villages, principally those in which the bhágbatái system prevailed, and it is this system, therefore, the effects of which I have to consider in proposing the amount at which the survey rates should befixed. The system under which each village was managed at the time of Captain Cruickshank's survey will be found in column 25 of the comparative statement,"and that now in force in column 26. One thing must, however, be premised, that in villages where the crop rates have remained in force till the present time, their pressure, often apparently excessive, has been considerably modified by the practice of levying the revenue upon the estimated or "ásra" instead of the measured bighd: "The former has now become as a rule much larger than the latter.

25. In A. D. 1820-21 and 1822 a revenue survey of the pargana of Das'Captain Craickshank's. kroi was made by Captain Cruickshank, which cenSurvey. sisted of theodolite measurements, mapping of village. boundaries, and of chain and aross-staff measuring, numbering, and registering, but not mapping the interior divisiohs or fields, nor were boundary-marks erected to show the limits of the latter. On the introduction of the survey into the Ahmedabad Collectorate it was found impracticable to make use of the division

Vide correspondence on this subject in 1851.52 betwoen Captain Fanning, then Superintendent of Surrey, Mr. Rogers, the Settlement Offcer, and Captain Wingate. into fields daid down by Captain Cruickshank's survey, principally far two reasons-that the actual state of occupancy did not at all coincide with the limits of the fields as given by Captain Cruickshank, and that owing to these limits not being shown in the village map or defined by actual boundaries, the time and trouble necessary to lay them down from the field registers was found to be greater than that required for an entirely new field measurement. A great quantity of very valuable statistical and other j̣fformation was collected by Captain Cruickshank, and you will see from the statements accompanying this report that I have made extensive use of it.
26. In order to give higher authority some idea of the complicated nature of the system of revenue management which now pre-

## Present revenue manage

 ment.vails in the greater part of the Daskroi Pargana, and also of the inequality of the present rates, and of
the consequent difficulty of fixing the new rates at a pitch which, while it shall not unnecessarily sacrifice Government revenue, shall not raise the demands upon individuals or single villager beyond what they at present pay to a degree likely to cause distress or serious discontent, I think it right to subjoin specimens of the dhára or book of the customs, according to which the revenue is collected in different villages.

## Umyarsud.

The following crops pay a jinnasvár bighoti whoever cultivates then, and in all lands:-Tobacco Rs. 3-12, pepper Rs. 2-5, sugarcane Rs. 9-5 per ásra bigha, and rice and sathi, when grown in irrigated land, not entered in the books as badadít from the wells being netw, \&c., Rs. 1-14.

- Certain fixed bagait lands in the permanent ofcupation of pátidars pay a fixed bighoti at aval Rs. 3-12, duyam Rs. 2-5 per ásra bigha, except two fields which pay at Rs. 2-15 and Rs. 2-2 respectively.

The lands held by Kanbis are divided into kehatas of 13 ásra bighas each. Up to 8 bighás they pay at Rs. 2-13, from that to 13 at Rs. 2-5; above this, if they * cultivate lánds in another Kanbi's kháta, they pay at Rs. 1.14, if land . not included in any kháta according to the dasţur of the pahana (quarter) in which it is situated.

All other talpad lands are distributed into quarters.
In the Vántia and Ganeshia quarters all kharif crops are assessed at Rs. 1-6 per asra bigha, in the eastern quarter at Rs. 1-10, in the western at Rs. 1-3, except one field at Rs. 0-15. But in the western quarter the Gametio Patie (Rajputs, \&c., descendants of the old holders of the village) pay only at Rs. i-6, and Paggis nothing. In other quarters they pay according to the dastur of the quarter.

The above, both in the land, in khátís, and that in quarters, is only for kharif dry crops.' For rabi the rates are as follows :-

For sankhi crops (those which do not follow a kharif crop) the same as $r$ the kharif would be. For vava-valli crops (those that follow a kharif crop,) Re. 0-15, except when grown by water brought from an alienated wells when Rs. 0-7.

- For hári or hot-weather crops as follow:-

If sankhi the same as kharif. * If following tharif only the same as vava-vari rabi. If a srd crop, nothing.
The above is only for talphd lands. For the lapsed vánta the rates are as follows:-

In manured and irrigăted aval land Rs. $3-12$ per ásra bigha for all crops and people. In other lands for kharif dry crops, in the savidia quarter Rs. $1-10$; in the "bhátha quarter Rs. $0-15$; excepte two fields which pay at Rs. 1-14 per measured bighas For rabi; if sankhi, the same as kharif; if vava-vari Re. $0-15$; for hări crops the same as in the talpad.
The quarter to which each field belongs is written in the margin of the - kharda.

All Kanbis of the talpad pay a- tai of Rs. 9-5 on each plough actually used, and those of the lapsed vánta Rs. 7-F.^ The above relates only to sarkári lands; there are distinct cesses for the alienated lands.

> Charora (managed by a Plough Tax).


Cultivators who do not own a plough, but have to hire one, or cultivate with the spade (kodála), pay jinnasvár bighoti rates as followe :-

On jovári and bájri, \&c., per asra bigha Re. 0-15. On wheat and barley, both sankhi and vava-vari, per asra bigha Rs. 1-14. Sugarcane
always pays Rs. 10 per asra bigha, and vegetables Rs. 4, besides the ploughtax. Those who cultivate rice without owning a plough pay a share of one-third by kaltar (estimate).

## Vanjar (Jinnasvár Bighoti).

| Jowár, bajxi, pulse, \&c. | ... | Rs. | 22 | 0 | per ásra bigha. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sugarcane in the bhatha | ... | \# | 1315 | 0 |  |
| Ditto in other land |  | " | 95 | 0 | \% |
| Kákri (a sort of cacamber) | ... | " | 30 | 0 | " |
| Sathi rice ... | ... | " | 22 | 0 | " |
| All other rice ... ... | ... | " | 312 | 0 | " |
| Fantak ... -.vo | ... | " | 410 | 0 | " |
| Ginger | ... | ; |  | 0 | 3 |
| Pepper -... ... | ... | , | 312 | 0 | " |
| Eranda (a sort of oil-seed) | ... | \% | 114 | 0 | " |
| Wheat sankhi | $\cdots$ | \# | 812 | 0 | " |
| Ditto vava-vari | $\cdots$ | 3 | 218 | 0. | " |
| Barley sankhi ... | ... | \% | 213 | 0 | 2 |
| Ditto vava-vari | ... | \# | 114 | 0 | , |
| All hári crops ... | ... | , | 015 | 0 | - $\quad$ |

There is a well on the village boundary. If the people of the other village take water from it they pay a piáva of Rs. 2 per assa bigha of cultivation, credited in the vanjar books.

Nurora (Khátábandi, complicated by Plọugh Tax, Crop and Caste Rate).

| Cantes. | Asara Bighso. | Rate. |
| :---: | :---: | :---: |
| Pátidárs, Kanbis <br>  |  | $\begin{array}{ccccc} \text { At Rs. } & 2 & 5 & 0 \\ " & \prime \prime & 1 & 3 & 0 \\ " & 0 & 1.5 & 0 \end{array}$ |
| Brahmins and Topodans ... $\{$ |  | At Rs, 2 3 0 <br> $\prime \prime$ 1 3 0 <br> $"$ 0 15 0 |
| $\begin{array}{lccc} \text { Rajpats } & \ldots & \ldots & \ldots \\ \text { Sepoys and } & \ldots & \ldots & . \\ \text { Culis } \ldots & \ldots & \ldots & . \end{array}$ |  |  |
| New Byas ... ... $\ldots\{$ |  | $\begin{array}{lllll} \text { At Rs. } & 1 & 14 & 0 \\ \hline & \# & 1 & 3 & 0 \\ " & \# & 0 & 15 & 0 \end{array}$ |

The above castes pay on as much land as is entered in their names, whether cultivated or not.


These castes pay only on the cultivated area. Certain men of the last mentioned castes who do not own bullocks, but hire them when required, pay Rs. 1-3 per ásra bigha of cultivation. Persons of other castes who hire bullocks pay Rs. 1-6, Rs. 1-3, or Re. 0-15 per ásra bigha of cultivation, at the discretion of the patels and talatis. There are four persons who, although they own ploughs and are resident cultivators, pay at the rate of Rs. 1-6 or or Ks. 1-3 per asra bigha of cultivation. If the old cultivators of three neighbouring villages
cultivate lands in Nurora they pey Ra, 0-15 per asra bigha of cultivation, if new. cultivators or other strangers Rs. 1-3.
27. All the above refers only to dry kharff crops. Other rates are as follows:-

| Rice ... | ... | ... |  |  |  | ra |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sathi | ... | $\ldots$ |  | 213 | 0 |  |
| Sugarcane | ... | ... | ... | 100 | 0 | " |
| Tobacco ... |  |  | ... | ${ }_{2}{ }^{4}$ | 0 |  |
| All rabi crops |  |  | ... | 20 | 0 |  |
| All hári crops |  |  |  |  |  |  |

These rates apply to all people, besides the amount of each man's "holl".
Small culturable spots in the sand of the river when cultivated with rab are paid for at Rs. 2 per ásra bigha; and nothing for hári crops. There is a Government tank irrigating alienated land, the holders of which pay a piáva of Re. 0-15 per ásra bigha of cultivation.

Plough Cesses.-All Kanbis and certain Bráhmins whose names are entered in the village boaks as old cultivators pay for each plough actually used, Rs. 2-13 as sathi vera.

All patidárs, Kanbis, old Vyás, and smiths pay on each plough actually used Re. 0-15 ; and Rajputs, culis, sepoys, and new Vyás Rs. 0-7 as kharach vera.

All cultivators pay 2 per cent. on the amount of their khata under the name vatáo, exchange.
28. The dhárás of the above 4 villages contain, I think, specimens of all the principal-modes of revenue management in use in those villages of the pargana in which a fixed bighoti assessment has not been introduced.
29. At the time of Captain Cruickshank's survey the pargana of Daskroi

Past and present limits of the pargana. was divided into two portions-one including the - bounded on the east by the Khári River, and comprising 146 villages in the collectorate of Ahmedabad; the other, including, with some other villages, that portion of the present Daskroi Pargana which lies eastward of the Khári, and comprising 35 villages in the Kaira Collectorate. At a subsequent period most of the Daskroi villages Iying eastward of the Khári were transferred to the Ahmedabad Collectorate. This was found to have increased the pargana to such a size that it was quite beyond the efficient supervision of one Mámlatdár. To obviate this inconvenience a Mahálkari was for four years stationed at Sarkhej, within whose charge was comprised several villages belonging both to Daskroi and to Dholka. This arrangement proving inconvenient, Government in A.D. 1840 sanctioned the formation of the new Jetalpur Pargana, composed of the portion of Daskroi lying south of Batva, with certain Dholka villages situated east of the Sábarmati, to which was afterwards added several Kaira villages on the southern bank of the Khári, in order to bring all villages irrigated from that river under the same revenue authority. These changes, I may remark, have considerably impeded the preparation of this report, as none of the totals given by Captain Cruickshank were available, but had to be recalculated from his detailed village statements.
30. I niow proceed to a consideration of the pitch of assessment that has

Analyais of accompanying statements. prevailed in the Government villages of the pargana, of its effects upon cultivation and upon the revenue, of the rate of increase in population, of the variations in the prices of agricultural produce, and of other particulars, from which I shall endeavour to deduce satisfactory reasons for the pitch of assessment the experimental adoption of which I am about to propose. The details upon which I base my arguments are contained in the statements accompanying this report, and these will, I trust, be found sufficiently intelligible, with the explanations of a few apparent discrepancies which will be found below.
31. The first statement to which I beg to direct your attention is that marked C, in which I have compared for each village the details of population, of cultivation, of village
management, and of revenue for the earliest period concerning which reliable data are in my possession with those which have been collected by the survey. Most of these data have been extracted from the books of the old survey, which, tha survey having been made in A.D. 1820-21-22, are extremely valuable, as affording reliable information as to the state of the pargana at the time when, orimmediately after, it passed into our possession, and upon which a judgment may be formed as to the general effects of our rule and revenue system.
32.' By the old survey books the population of the villages forming the present Daskroi Pargana, exclusive of course of alienated villages, and of the
 population resident within the walls of the city, is shown to have been males 26,524 , females 19,328-total 45,852 , or an average of ' $188 \cdot 40$ to the square mile. By the present survey the population of the same area has been found to be males 42,545 , females 35,847 total 78,392 , or an average of $322 \cdot 11$ to the square mile, the total increase of population being a trifle over 70 per cent. in less than forty years.
33. By the old survey the houses inhabited by the then population were found to amount to 13,529 . By the present survey they are found to have increased to 25,907 (of which 22,012 are tiled and 3,895 thatched), the percentage of increase being $91 \cdot 49$. The larger proportionate increase in the number of houses compared with the increase of the population is satisfactory, as indicating an increase in the material comforts of the people.
34. The books of the late survey show that the wells in Goveranient lands then amounted to 962 in repair and 307 out of repair-total 1,269. There are now 1,776 in repair and 228 out of repair-total 2,004.
35. The number of ploughs is stated in the books of the late survey as 5,009 ; they now amount to 8,047 .
36. Columns 13 to 24 of the statement contain the details of the arable area in each village according to the old and present surveys. After the statement had been commenced, however, I found that in the books of the late survey the details of the whole arable area, both of Government and alienated lands, were given, not separately, but together, while in the registers of the present survey the relative quantity of cultivated and waste alienated land is not given, this information not being afforded by our system : consequently columns-to - showing the details of the arable area at the time of the old survey give the total arablearea of Government and alienated lands, while columins - to show the details of cultivation in Government lands' alone. This I extremely regret, as it deprives the statement entirely of its value as a meaus of comparing the cultivation at different periods in each village. I find, however, from other returns that the amount of alienated land annually cultivated is about 80 per cent. of the whole, and as I have the whole amount of alienated land, both dry-crop, garden, and rice, I can from this give the totals for the 119 villages with sufficient accuracy :-

By the late Suriey.

37. Lands returned in the books of the old survey as "waste for one year," or lying fallow at the time of survey, have been here entered as cultivated, as such lands are entered as cultivated in the present survey registers. The discrepancy, which is only 1 per cent. between the total arable areas according to the old and new survey, arises from inaccuracy in the measurement.
38. From the above table it will be seen that the entire cultivation has increased in less than forty years about $35 \cdot 11$ per cent., while garden and rice cultivation alone has increased 50 per cent.-this corresponding with the increase in the number of wells noticed above.
39. Other information, relating to the castes of which the population of each village is principally composed, and to the modes of revenue management, will be found in columns 5 and 8 of the statement. This, though not absolutely required for this report, I considered may be found interesting.
40. I now turn to the diagram and its accompaniment, lettered $\mathbf{A}$ and $B$, from which you will perceive that the average cultivated area of Government lands in the first five years (from Samvat 1885 to Samvat 1889 inclusive) included

Diagram and accompaniments. in the diagram, and for which reliable data are forthcoming, was 53,815 acres,
and in the last five years (from Samvat 1912 to Samvat 1916 inclusive) 56,174 and in the last five years (from Samvat 1912 to Samvat 1916 inclusive) 56,174 acres, being an increase of only 4.30 per cent. It would seem, then, that a large increase of cultivation took place during the first years of our rule, consequent upon the substitution of a peaceful and settled state for one of anarchy and misrule, and perhaps, as mentioned by Captain Cruickshank, upon a succession of very favourable seasons; but that this was not followed by anything like a proportionate increase in subsequent years, and looking at the facts of the great increase in population, of the profound peace which the district has enjoyed, of the advantage it possesses in a constant demand for its produce by a large nonagricultural population situated in its midst, and of the quantity of arable Government land which still remains uncultivated, I cannot but come to the conclusion that the district generally has been over-assessed.
41. In the accompaniment to the diagram you will, I think, perceive that, generally speaking, an increase in the rate of assessment corresponds directly with a diminution of cultivation and with an increase in the percentage of remissions.
42. I have given in the same statement the average prices, in the Ahmed.

Prices of agricultaral'produce.
abad bazar, of the three staple products of the pargana
-rice (sitarsal, the medium quality), bajri, and irrigated wheat-corresponding with the three principal divisions of soil into dry-crop, rice, and bágát, for all the years for which reliable returns are forthcoming. The prices have been calculated, as usual, by the number of sers which can be obtained for one rupee. You will see that prices, especially that of bajri, were extremely low in the first years of the diagram; that in the bad years 1832-33 and 1833-34 they rose in an extraordinary manner, and from that time gradually declined till they reached the lowest point of depression in the years A.D. 1851 to 1857, since which latter year they have again considerably risen. It is a curious problem, and one of which I cannot venture to attempt a-solution, to inquire how it has occurred that with a population rapidly increasing, a large and growing demand, and an almost stationary area of land under cultivation, the prices of agricultural produce have not only not risen, but have steadily declined (except in seasons of scarcity) during a series of years. One cause of this, and a satisfactory one, we may, however, I think, assume to have been an increase of agricultural skill, capital, and industry, which has produced larger proportionate returns from the same area. The increase in the cultivation of rice for instance, as I have shown above (paragraph 36), has been nearly 80 per cent. since the old survey, and we accordingly find that the price of this article has declined to a greater degree than that of other grains, and has lately been actually below that of bajri. And it is reasonable to conclude that under a settled Government, and with the confidence that they themselves would enjoy the fruits of their own industry, the agricultural classes have bestowed greater pains upon their cultivation.

DIAGRAM A, exhabiting the extent of Government Land anmually under Cultivation for the last 32 Years in *120 Villages of the Dus\%rohee Purgurnah, and its Gross and Net Assessment.


EINIANATION:

1. The various iters are measwred bythe Scate of Acres and Rupees carried acrvss the Itiagram
2. The summit of the darker coloured portion of each Column incticntes the Runtal, and thut of the Wigher the Gross Assessment on the Giltivated Ar ea of Governmentilands, the intermwatiate spaces being the amount of remissions.
3. The Dotted Lines in each Cotumon show the area of Government lands in cultivation tor the severat Years reduced into Acres.
tr The summit of the Blue Cohumn shows the Area of Ar able land as ascertained by the Survey and that of the Yellow Column, the estimated Gross Revtal according to the Rates proposed.
4. The Thick broken tines carried across the Diagram show the Area in Acres of Alienated Land uniker Cultivalion, and the broken lives the amount of Assessment in the shape of Quit-rents and Cesses
5. The Thick line across the Bhue Cotumn shows the totalATableidrea of Ahienated land as ascerticineat by the Survey.
6. The considerations I have mentioned above (paragraph 40) would have induced me to propose rates four annas lower than those I am about to submit for your consideration, and thus to effect a general, though moderate, reduction of rates through the pargana. And I beg to remark that should superior authority see fit to lower the rates I am about to propose (4 annas all round), I entertain no doubt that this will produce an excellent effect upon the prosperity of the people, and that the immediate sacrifice of revenue will be made up in the course of a few years by increased cultivation.
7. But on the other hand $I$ am, bound to consider the imperative necessity which exists to raise as much revenue as possible, and I must, therefore, fix my maximum rates not so much with a view of producing effects, however otherwise desirable, as of assessing the pargana as highly as it will bear.
8. It must, therefore, be borne in mind that the remissions, the amount of which is a good test of the pressure of existing rates, have in the last thirty-two years averaged annually only Rs. 5,166 , being only 3.64 per cent. upon the gross assessment; that for the last seven years they have been almost nominal; that the prices of agricultural produce are still rising, and that there appears little prospect of their falling so low as they were seven years ago ; that the completion of the railway between Ahmedabad and Bombay will doubtless considerably increase the value of land in Daskroi; and finally that the introduction of the survey system, and the substitution of a fixed and even assessment for the present fluctuating and inequitable rates will of itself operate as a considerable relief to the cultivator, independently of an actual reduction of his payments.
9. I have therefore endearoured to fix the pitch of assessment in such a manner as, while equalising the rates, to keep the revenue as near its present amount as possible, without raising the assessment so as to cause distress or serious discontent in those villagers or among those classes which at present pay

Statement. comparatively low rates. For the details of my proposed settlement I beg to refer you to the statement lettered D, from which you will see that I propose six classes of villages according to the dry-crop rates, the class into which each village is thrown being

Classes of villages. regulated (except in the case of Umvarsud, No. 95, which is raised a class on account of its being upon the northern road, and having a market within itself) almost entirely by distance from Ahmedabad. The 3 villages forming the last class are isolated within the territories of His Highness the Gáikwår.
47. The 1st class contains 32 villages, all in the immediate neighbourhood Maximum rates. of Ahmedabad, and the proposed maximum dry-crop rate is Rs. 3-8, this being lowered 4 annas for each class below.
48. The average dry-crop rates for each class of villages as they at present Average ratea. exist, and according to my proposed maximum rates, are as follows :-

| Number of Villagen. | Class of Villagen, | Existing average Rate. | Proposed average Rata. |
| :---: | :---: | :---: | :---: |
|  |  | Rs. a. p. | Rs. a p. |
| 32 | 1 | 384 | 291. |
| 26 | 2 | 2101 | 249 |
| 18 | 8 | 263 | 232 |
| 19 | 4 | 236 | $115{ }^{\circ}$ |
| 21 | 5 | 1132 | 1117 |
| 3 | 6 | 246 | 199 |
| 119 |  |  |  |

The last 3 villages appear from the state of cultivation to have been considerably over-assessed under the late system.
49. You will see that the first 20 villages on the list have been consolidated into 4 new villages, as proposed by you and sanctioned by the Revenue Commissioner, N. D., in his letter to me, No. 2562 of the 19 th of November last, and a detailed statement of which you will find in paragraph 70.
50. The village of Juni Choti Daskroi, consisting of arable lands within the walls of the city, has been excluded from the statements, although I have been obliged to include it in the diagram. . As it only contains, however, 15 acres and 32 gunthás of Government cultivated land, this does not affect the comparative accuracy of the diagram. I addressed you on the subject of this village (No. 125, dated 27 th October last), but have not yet received a reply.
51. Two alienated villages (Batva and Narole) have been measured and classed, and are entered in the statement. Narole has been measured by desire of the proprietor, who has agreed to abide by the survey rates. On the subject of Batva I have addressed you No. $\frac{127}{8.0}$. dated the 12 th current.
52. The principle hitherto observed in this survey, of keeping the soil and water distinct, has been adopted in Daskroi. I have fixed, as a general rule, three classes of rice water rates, Rice water rates. though I. have admitted slight variations in the rate in some villages, where the water classification from peculiar causes appears to me too high or too low as compared with other villages.
53. You will see (column 16) that my highest maximum rice water rate is 4 rupees This is, however, for convenience and facility in computation, calculated on 16 and not 24 annas, which latter is, you are aware, the maximum of the water scale. As in Daskroi there is no rice irrigation from baitha water, and but little from tanks; it seldom happens that the water is classed higher than annas 16. Rupees 4 at annas $16=$ Kis. 6 at aunas 24, which is the highest water rate I propose for Daskroi. The average water rate will be Rs. 2-9-11, which is, I am convinced, high enough.
54. It may be necessary to explain that the scale of soil annas in rice is only half that of jiráit, which is the practice in this survey. Eight annas of rice soil classification, therefore, is equivalent to and rated the same as 16 annas of dry crop.
55. You are aware that in garden lands, until the bágít settlement is

> Bágáit rates. made, it is impossible to state with accuracy the bigaíit rates. I have therefore shown the rates upon the soil alone, and doubled these (column 26) to show approximately the rentalof bágait land. This will, I think, though probably rather too high, be near enough to give a fair estimate of the entire survey rental of each village. The highest bágáít rate will probably be about Rs. $8-8$, this being in bhátha lands of 1st class of villages when the soil is classed as high as 20 annas. The average bagrít rate will certainly be under Rs. 5. The present average bagaít rate is Rs. 5-15-6.
56. The following are the results of my proposed settlement :-

57. From these figures you will see that though rates generally have been slightly lowered, the survey rental will be somewhat higher than average collections for ten years,-a result which will, I hope, be deemed satisfactory.
58. "Piáva" on alienated lands watered from Government wells or tanks will be imposed on the same principles as those adopted by you in Jetalpur,

[^4]but the amount will not be actually. collected until the receipt of the final decision of Government on the question.
59. It may be interesting to compare with the above results some of the corresponding figures relating to the neighbouring pargana of Jetalpur which I have extracted, as below, from your report(as Settlement Officer, on the introduction of the revised rates into that district) No. 1397, dated 10th September 1859:-


2nd.-Late average Realisations per Acre.


3RD-Survey Maximum Rates.

60. It only ramains to explain a few apparent discrepancies in the statements which accompany this report. The difference between the cultivated area, 64,613 acres, ascertained by the
survey, and 59,684 acres, returned as cultivated in the cultivated area, 64,613 acres, ascertained by the
survey, and 59,684 acres, returned as cultivated in

Explanation of apparent discrepancies. Sanvat 1916, is caused by fallow lands being returned as cultivated in the suryey registers, and also by small portions of waste being included in cultivated survey numbers.
61. You may be struck by the difference between the amounts according to the late system (shown in columns 28, 29 and 30 of Statement D), being-

1st.-The revenue found by existing average rates applied to the cultivated area as ascertained by the survey.
2 nd . -The average of ten years' collections.
3rd.-The revenue on Government lands last year, Samvat 1916.
62. The figures are, however, correct, and the reasons for the discrepancies are as follows :-

1st.-That in some villages a portion of the revenue is raised by plough and other cesses, which could not be included either in dry-crop, rice or garden rates, the effect of which is that in those villages the present average rates are shown as a triffe lower than they really are.
2nd -That the cultivated area, as shown by the survey, includes fallow lands, \&c., as I have noticed above, and that remissions have not been deducted, the effect of which is that column 28 shows the revenue on Government cutivated lands by late rates as higher than the real collections.
3 rd .-That I am obliged to treat ásra bighás as if they were measured ones, whereas they are somewhat larger than the latter.
4th. - That last year was in some respects an exceptional one, a larger proportion of rabi crops than usual having been raised owing to the general deficiency of rain.
63. I now proceed to notice the professional operations connected with the Professioual oporations. measurement and classification of the soil.
64. The measurement of these villages was carried on in the years shown below, and under the superintendence of the following officers:-

|  | W orking Seasons | Officers superintiending Operationa. |
| :---: | :---: | :---: |
|  | 1853-54 | Lieutenant Cumming and Captain Jerome. |
| Measurement, by whom auper- | 1854-55 - ... | Captain Jerome. |
| intended. '. | 1855-56 ... | Captain Jerome and Messrs. Beyts and Sommers. |
|  | 1856-57 | Messrs. Beyts, A. Bulkley, and Nepean. |
|  | 1857-58 ... | Mr. Nepean. |
|  | 1859-60 | Superintendent. |

And the classification as under, viz. :-

Clasuification, by whom ouper. Intended.

| $1855-56$ | $\ldots$ | Mr. Critchell. |
| :--- | :---: | :--- |
| $1857-58$ | $\ldots$ | Mr. Rase. |
| $1858-59$ | $\ldots$ | Messra. Hulkley, Rae, Beyts and Critchell. |
| $1859-60$ | $\ldots$ | Saperintendent. |

1855-56
1857-58
1858-59
1859-60

Mr. Critchell.
Mr. Rae Superintendent
65. The general accuracy of the work, and the test to establish the same for both operations, is set forth in the following statement :-

66. It appears from these statements that the average error of the measurement was considerably under. half an acre per cent. and
Average error. that of the classification of soil 7 and of water $7 \frac{1}{9}$ pies per field.
67. Notwithstanding the apparent accuracy of the work, as shown by test, the Settlement Officer was not altogether satisfied with the classification, which in sone villages (when applied to calculating the rates) proved to be uneven

Late Settlement Officer's reasons for not proceeding with the settlement last year. and inequitable. Finding also numerous inaccuracies in the bágaít takhtdds prepared under Mr. Rae's superintendence, he abandoned his intention of introducing the revised assessment last season, and the Revenue Commissioner, N. D., called upon me in his letter No. 917 of the 23rd of April to explain in detail the reasons which induced this determination.
68. In my reply to that letter (No. 187 of the 8th of May 1860) I informed the Revenue Commissioner, N. D., that the principal reasons were:-

1st.-That a group of villages near Ahmedabad had been classed proportionally too low, and would have to be done over again.
2nd.-That all the rice land under wells had, in comparison with rice land under tanks, been classed too low, and would have to be raised.
69. This work has now been completed. The villages noted in the margin have been entirely reclass-

Devision of the classification of water in the pargans of
Das Daskroi.

1. Berámpar.
2. Rajpar Japti.
3. Muktampur.
4. Sherkctra
5. Danilimra
6. Kua. 7. $\left._{\text {Lápar. }}\right\}$ Bágaft.
7. Surpar.
8. Navi Daskroi. 10. Mukarba.
9. Fattehvari.
10. Jehángirpur.
11. Ajábibi.
12. commended in the 22nd
13. Multánpur. . and former paragraphs of
14. Multínpar. my letter above referred
15. Nugina whole district under wells has been completely revised on the principle remy letter above referred
to, which has, as you will ed, and the classification of the rice land of the observe, made the classification of water very much more uniform and equitable than it was before.
16. In the 2nd clause of paragraph 2 of my letter above referred to $I$ have informed the Revenue Commissioner, N. D., that the late Settlement Officer re-

New villages alluded to in
paragraph - commended the detached lands, which constitute certain villages in the neighbourhood of Ahmedabad, should be brought within the limits of adjoining villages, and that the lands so united should be re-mapped and re-classed.
71. This recommendation has been carried out, and will cause the changes set forth in the following statement, which shows that the 20 small villages to which these detached and mixed lands belonged will by this arrangement be incorporated in the 4 villages of Rakhial, Dariápur, Asarva and Rajpur :-

Statement showing how detatched Lands, comprising 20 Villages of the Daskroi Pargana, have been incorporated with those of 4 inhabited villages.

72. In conclusion, should you require any additional information beyond what this report furnishes, I shall esteem it a favour if you will call for it without returning the report itself, which it is very necessary should go on to the Revenue Commissioner, N. D., with the least practicable delay.

## 1 have, \&c.,

C. J. PRESCOTT, Captain, Superintendent, Revenue Survey, Gujarát

Accompaniment to Diagram showing the Oultivation, the Gross Assessment, the Collections, the Rernissions, the average rates of Assessment, and the avarage rate of Collections per Acre in 120 Government Villages of the Daskroi Pargana for the thirty-two years antecedent to Revenue Survey (proposed) Assessment.

| Yearg. |  |  |  | Cultivated. | Gresa Asseasment. | Collections. | Remissions. | $\Delta$ verage Rate of Assessment per Acre. | Average Rate of Collection per Acre. | average Prices of 3 Staple Prodjets or tiar Pargaka peit Ropma. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Samvat. |  | A. D. |  |  |  |  |  |  | Rice, Medium Quality. | Bajri. | Wheat. | Remark. |
|  |  |  |  | Acres. | Rs. | Rs. | Rs. | Rs. a. p. | Rs. a. p. | M. s. t. | M. s. t . | M. s. t. |  |
| 1885 | ... | $\cdots$ | - 1828-29 | 55,333 | 1,72,050 | 1,67,568 | 4,482 | $\begin{array}{lll}3 & 2 & 0\end{array}$ | 3 0-0 | ..... | ...... | ...... |  |
| 1886 | ... | ... | 1829-30 | 58,357 | 1,71,3:6 | 1,6:3,161 | 8,165 | 2150 | 2130 | $\cdots$ |  |  |  |
| 1887 | ... | ... | 1830-31 | 54,117 | 1,59,755 | 1,52,0:2 | 7,729 | 2150 | 2130 | 0250 | $1 \begin{array}{lll}1 & 5 & 25\end{array}$ | 02940 |  |
| 1888 | ... | ... | 1831-32 | 53;159 | 1,54,656 | 1,47,679 | 6,977 | 2140 | 2130 | 0260 | 1660 | 03510 |  |
| 1889 | ... | ... | 1832-3:3 | 48,111 | 1,50,533 | 1,40,288 | 10,245 | 3. 20 | 2150 | 0230 | 02340 | 02070 |  |
| 1890 | $\ldots$ | ... | 1833-34 | 23,268 | 99,362 | 83,179 | 16,183 | 440 | 390 | 0180 | 01425 | 01350 |  |
| 1891 | $\cdots$ | ... | 1834-35 | 51,291 | 1,67,648 | 1,64,119 | 3,529 | 3110 | 330 | 02440 | 01825 | 01810 |  |
| 1842 | ... | ... | 18:15-36 | 47,161 | 1,54,832 | 1,49,4:8 | 5,874, | 3840 | 3 3 0 | 0260 | 02235 | 02110 |  |
| 1893 | $\ldots$ | $\ldots$ | 1836-37 | 48,353 | 1,59,572 | 1,56,901 | 2,971 | 3850 | $3{ }^{3} 40$ | 02770 | 02440 | 02210 |  |
| 1894 | $\cdots$ | ... | 1837-38 | 47,784 | 1,61,040 | 1,57,166 | 3,974 | $3{ }^{3} 60$ | $\begin{array}{lll}3 & 5 & 0\end{array}$ | 02320 | 02160 | 02030 |  |
| 1895 | ... | ... | 1838-39 | 47,142 | 1,61,112 | 1,51,128 | 8,984 | 36.0 | $\begin{array}{llll}3 & 3 & 0\end{array}$ | 01770 | 02050 | 01920 |  |
| 1896 | ... | - | 1839-40 | 59,191 | 1,79,015 | 1,74,215 | 4,800 | $\begin{array}{llll}3 & 0 & 0\end{array}$ | 2150 | 01860 | 02740 | 02260 |  |
| 1897 | $\cdots$ | $\cdots$ | 1840-4] | 60,925 | 1,84,602 | 1,82,359 | 2,243 | $\begin{array}{lll}3 & 0 & 0\end{array}$ | 300 | 0210 | 0315 | 02455 |  |
| 1898 | $\cdots$ | $\cdots$ | 1841-42 | 61,439 | 1,88,173 | 1,87,305 | 868 | $\begin{array}{lll}3 & 1 & 0\end{array}$ | 3 l | 02260 | 02850 | 02660 |  |
| 1900 | $\ldots$ | $\cdots$ | 18+2-43-44 | 51,209 60,802 | 1,79,371 | 1,77,887 | 1,484 | $\begin{array}{lll}3 & 0 & 0 \\ 3 & 1 & 0\end{array}$ | $\begin{array}{lll}3 & 0 & 0 \\ 3 & 1 & \\ \\ \end{array}$ | $\begin{array}{ll}0 & 24 \\ 0\end{array}$ | $\begin{array}{lllll}0 & 35 & 25 \\ 0\end{array}$ | ${ }_{0}^{0} 3315$ |  |
| 1901 | ... | $\ldots$ | 1844-45 | 60,250 | 1,85,058 | 1,82,208 | 2,850 | 3 l | $\begin{array}{lll}3 & 1 & 0 \\ 3 & 0 & 0\end{array}$ | 03020 0 | 0 0 222 | 0 0 2633 |  |
| 1902 | ... |  | 1845.46 | 60,576 | 1,81,720 | 1,77,673 | 4,047 | 300 | 2150 | 0265 | 02750 | 02464 |  |
| 1919 | ... |  | 1846-47 | 62,073 | 1, 57,805 | 1,86,388 | 1,417 | 300 | 300 | 08329 | 02921 | 02713 |  |
| 1904 | ... | $\cdots$ | 1847-48 | 59,716 | 1,79,263 | 1,77,934 | 1,329 | 3. 00 | 2150 |  | 03365 | 02640 |  |
| 1905 | $\cdots$ | . | 18+8-49 | 53,9:7 | 1,63,978 | 1,20,054 | 43,424 | $3{ }^{3} 00$ | 2400 | 02515 | 02833 | ...... |  |
| 1906 | ... | ... | 1849-50 | 60,269 | 1,79,649 | 1,78,642 | 1,007 | 3-0 0 | 2150 | 02626 | 02560 | ...... |  |
| 1907 | ... | ... | 1850-51 | 58,866 | 1,89,845 | 1,80,869 | 8,976 | $\begin{array}{lll}3 & 4 & 0 \\ 3 & 0 & \end{array}$ | $\begin{array}{llll}3 & 1 & 0\end{array}$ | 02868 | ${ }_{0}^{0} 3358$ |  |  |
| 19118 909 | $\ldots$ | $\cdots$ | 18.51 .58 | 62,4+3 | 1,88,998 | 1,83,350 | 5,648 | $\begin{array}{llll}3 & 0 & 0 \\ 3 & 2 & \end{array}$ | 2150 | 03116 | ${ }_{0}^{0} 329$ | $\begin{array}{llll}0 & 28 & 52 \\ 0\end{array}$ |  |
| 909 910 | $\ldots$ | $\cdots$ | 1852-5.3 | 63,164 | 1,96,361 | 1,92,672 | 3,689 | $\begin{array}{llll}3 & 2 & 0\end{array}$ | 310 | 03450 | 03257 | $\begin{array}{ll}0 & 30 \\ 0 & 21\end{array}$ |  |
| 911 | $\ldots$ | $\cdots$ | $18.53-54$ 18.54 | 60,946 59,285 | $1,93,584$ $1,87,757$ | $1,91,800$ $1,87,181$ | 724 576 | $\begin{array}{llll}3 & 3 & 0 \\ 3 & 3 & 0 \\ & & \end{array}$ | $\begin{array}{lll}3 & 2 & 0 \\ 3 & 3 & 0\end{array}$ | $\begin{array}{llll}0 & 34 & 60 \\ 0 & 37 & 18\end{array}$ | $\begin{array}{llll}0 & 32 \\ 0 & 30 \\ 0 & 32\end{array}$ | 03132 0 0 2863 |  |
| 912 | ... | ... | $1855-56$ | 54,915 | 1,76,564 | 1,75,975 | 589 | $\begin{array}{lll}3 & 3 & 0\end{array}$ | 330 | 03920 | 03576 | 02860 |  |
| :913 | ... | , | 1856-57 | 55,378 | 1,76,820 | 1,76,487 | 338 | 3-3 0 | 330 | 03733 | 02775 | 02556 |  |
| 914 | ... | ... | 18:7-58 | 54,118 | 1,74,541 | 1,74,4:2 | 119 | 340 | 3840 | 02853 | 02419 | 02632 |  |
| 1915 | ... | ... | 1858.59 | 56,775 | 1,74,784 | 1,74,590 | 194 | $\begin{array}{lll}3 & 1 & 0\end{array}$ | 3110 | 02231 | 02355 | 02216 |  |
| 1916 | ... | ... | 1859-60 | 59,684 | 1, 57,205 | 1,87,118 | 87 | 320 | 320 |  |  |  |  |

Average rate of assessment and collections for thirty-two years
© COMPARATIFE STATEMENT of the Population, Wells, Arable Aren, System of Village Management, and Revenue of 120 Government Villages of the Pargana Daskroi, Zilla Ahmedabal, according to Cruichshanh's Survey and the present Revenue Survey, 1859-60.



STATEMENT C-continued.



## APPENDIXC.

STATEMENT contrasting the Survey Settlement with past payments for the

|  | at Villageen. | $\left\lvert\, \begin{gathered} \text { Average annuan } \\ \text { amount of colluetions } \\ \text { tor to yens. } \end{gathered}\right.$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | According to Jumbloandil of 1900-al. |  |  |  |  |
|  |  |  | Rice. | Jtrast. | Bagala. | Total | Ries. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  |  | Rs. a. p. | Rs. | Rs. a. p. | Rs. e. p. | Rs. | Rs. a. p. |
| 1 | Kumb | 2,530110 | 1228 | 1,384 | 1,354 151 | 2,881 110 | ${ }^{836} 00$ |
| $\stackrel{2}{3}$ | Kuruhi | 3,171 611 | 361311 |  | $\begin{array}{rrrr}18 & 8 & 1 \\ 4 & 11 & 0\end{array}$ | $\begin{array}{r}679 \\ 3,519 \\ \hline 11\end{array}$ | 37180 |
| 4 | Kরјjipur... | 1,469 8 \% |  | 731118 | 787122 |  | 12 |
| 5 | Kua ${ }^{\text {a }}$. | 6,564 110 | 2,499 107 | 3,568 3 3 8 | 1,053 319 | 7,11920 | 1,877 12 |
| 6 | Kali | 1,66998 8 | 106121 | 1,5i67 310 | 1784 | 1,80248 | ${ }_{268} 120$ |
| 7 | Kochrub | 1,150 8 \% 0 | 280 | $\begin{array}{llll}571 & 5 & 1 \\ 479 & 1\end{array}$ | 578 9 | 1,162 68 | 148 |
| 8 | Koturpur | $\begin{array}{llll}245 & 6 & 0 \\ 970 & 0\end{array}$ |  | 409 <br> 9 <br> 918 <br> 7 <br> 10 |  | 40817 | ${ }_{6} 8$ |
| 9 | Kolba ... |  | 6110 | 918 7 10 <br> 2,815   | 26010 <br> 582 <br> 8 <br> 11 |  | ${ }^{3} 8$ |
| 10 | Khoruj ... | $\begin{array}{llll}2,823 & 5 & 2 \\ 1,087 & 12 & 8\end{array}$ | 6110 | 2,815 <br> 1,288 | 58211 <br> 138 <br> 188 | $\begin{array}{llll}3,404 \\ 1,420 & 6 & 10\end{array}$ | ${ }_{670}^{670} 4$ |
| $\begin{aligned} & 11 \\ & 12 \end{aligned}$ | Khoriar... | 1,700 21 | 12715 | 1,765129 | $\begin{array}{r}132 \\ 34 \\ \hline 15\end{array}$ | 1,420 1111 | 2328 134 |
| 13 | Gaspur ... | 2,096 114 | 38140 | $\begin{array}{llll}531 & 0 & 4\end{array}$ | 1,847 88 | 2,417 70 | 718 |
| 14. | Gerutpur | 1,709 11 | 1,214 07 | 56684 | 148110 | 1,929 003 | 680 8 |
| 15 | Gerutnagar | $683{ }^{6} 4$ | 37561 | 4351511 | $\begin{array}{llll}19 & 6\end{array}$ | 83018 日 | 3434 |
| 16 | Gota | 1,800 126 <br> 12 | 211 4 4 5 | 1,190 $12{ }^{2}$ | 451 '13 10 | 1,853 146 | 57412 |
| 17 | Gantloria | 1,099 113 | 63.5 | ${ }^{975}{ }^{6}{ }^{6} 2$ | $\begin{array}{llll}75 & 2\end{array}$ | 1,113 1311 | 9912 |
| 18 | Ghurasur | 1,160 16 | 48130 | 1,646 145 | 1701110 | 1,866 78 | 3530 |
| 19 | Chandkbaira | 3,268 15 6 | $6715 \quad 5$ | 3,462 61 | 46514 | 3,495 610 | 2408 |
| 20 | Chilora ... | 690123 |  | 1,064107 |  | 1,064 107 | 14 |
| 21 | Chandial | 1,013 15 9 | 44.26 | 1,316 118 |  | 1,360 140 | 4270 |
| 22 | Chandloris | 1,783 109 | 2501410 | 1,254 $10 \quad 2$ | 11780 | 1,622 120 | 3754 |
| 23 | Cheupur | 967 4 6 | 167.46 | $901{ }^{6} 7$ | 640 | 1,073 151 | 1574 |
| 24 | Changispur | $\begin{array}{ccc}1,062 & 1 & 7 \\ 1,315 & 12 & 10\end{array}$ | 4180 | 671 520 520 13 | 425112 | 1,138 136 | 408 |
| $2{ }^{2}$ | Choti Daskroi ( ${ }^{\text {New }}$ ) | 1680 | -.... | 667 167 | 779 0 | $\begin{array}{r}1,299 \\ 167 \\ \hline 88\end{array}$ | ..... |
| 27 | Charori | 433110 |  | 458130 |  | 458130 | 2394 |
| 28 | Jaggatpur* | 471710 | 38136 | 324113 |  | 705149 | 175. |
| 29 | Jimiatpur | $\begin{array}{lll}1,29310 \\ 23 & 10\end{array}$ | 154120 | 1,075 6 3 <br> 24   | 4331511 | -1,604 2. 2 | 2.54 |
| 30 | Jundal ... | 2,346 78 | 40316 | 2,484 0 | 260102 | 3,147 1111 | 4058 |
| 31 | Jelángirpur | 14317 |  | ${ }^{124} 129811$ | 561511 | 181810 |  |
| $\begin{aligned} & 32 \\ & 33 \end{aligned}$ | Jhanu ${ }_{\text {Tarípur }}$ | 1,692 708 708 12 | 78155 | 1,290 12120 | 394 6 <br> 104  | 1,764 18 | 23112 |
| 34 | Tragur ... ... | 1,227 1011 | -118.18 | 1,113418 | 185, 68 | 1827 1,437 8 | ${ }^{554} 48$ |
| 35 | Thulti ... | 1,964 103 | 25789 | 1,359 1310 | 71128 | $1,6 \times 9$ |  |
| -36 | Dariápur | 1,431 129 |  | 67132 | 678109 | 1,3+9 1311 | 04 |
| 37 | Duntali | 1,239 127 | $78 \quad 27$ | 1,195 130 | 424109 | 1,698 $10 \quad 4$ | 1900 |
| 35 | Dhulakua | 28679 |  | ${ }^{417} 66$ |  | 41768 |  |
| 39 | Nugina ... | 429112 | 1100 | 40445 | 5200 | $467 \quad 45$ | 138 |
| 40 | Nudicha | 27200 |  | $\begin{array}{llll}19 & 4 & 2\end{array}$ | 266154 | 28836 |  |
| 41 | Nurora | 3,285 66 | 5727 | 4,031 1510 | 4547 | $4,127 \quad 70$ | 12912 |
| 42 | Purdhole | $\begin{array}{llll}1,2288 & 9 & 7\end{array}$ | 6870 | $793{ }^{793}$ | 89318 | 1,754 120 | 740 |
| 43 | Pusung ... | 2,921 14.14 | 207711 | 2,852 113 | 30185 | 3,361 117 | 1,0124 |
| $\begin{aligned} & 44 \\ & 45 \end{aligned}$ | ${ }_{\text {Piplode }}$ | $\begin{array}{r}593 \\ \mathbf{5}, 88614 \\ \hline 10\end{array}$ | 26011 | $\begin{array}{llll}51, \\ 731 \\ 731 & 1 & 1 \\ 12 & 5\end{array}$ | 1,675 411 | 602 2,433 2 |  |
| 46 | Pore | 2,132 10 | 2011 | 2,265 15 | 1,685 78 | 2,051 <br> 2,40 | $6{ }_{6}{ }^{1}$ |
| 47 | Fatehpar | 153 9 10 |  | 110011 | 68157 | 17906 | 50 |
| $48^{\circ}$ | Fatebrari | 2,104 910 | $59 \quad 5 \quad 3$ | 1,571 3 \% | 54503 | 2,173 3 3 | 2748 |
| ${ }_{50} 49$ | Fardabad Bakrole ... | $\begin{array}{r}292 \\ \hline 1,665\end{array} 1295$ |  | 109120 | 17840 | $2 \times 8$ O | 180 |
| $\begin{aligned} & 50 \\ & 51 \end{aligned}$ | Bakrole ... <br> Bibipar | $\cdots$ | 1,046 <br> 469 | 619 95 9711 7 | $\begin{array}{r}45714 \\ 314 \\ \\ \hline 14\end{array}$ | 2,123111 | 1,17040 |
| 52 | Bagfurdosh | $\cdots$$\cdots$ 11,335 4 4 |  | 1,287 788 | $\begin{array}{r}36 \\ 69 \\ \hline 0\end{array}$ |  |  |
| 53 | lidrabad | $\begin{array}{llll}658 & 2 & 1\end{array}$ | 13004 | ${ }^{1} 6666$ |  | ${ }^{1,109} 298$ | 190 0 |
| 54 | Burthal | $\begin{array}{llll}1,322 & 7 & 7\end{array}$ | 28156 | 1,622911 | 397149 | 2,04978 | 470 |
| 55 | Behrampar | $\begin{array}{llll}2,789 \\ 1,797 & 1 & 7\end{array}$ | 8 <br> 688 <br> 20 | 2,147 410 | 497 298 | 2,651337 | 490 |
| 57 | Boruckuev Bhat ar | 1,79788484 1212 | 68223 | $\begin{array}{lll}1,008 & 7 & 2 \\ 1,055 & 7 & 1\end{array}$ | 271 <br> 126 <br> 14 |  | 6 H 40 |
| 58 | Bhaduj ... | $2,016{ }^{2} 10$ | 407 is 9 | 1,669 142 | 373147 | 2,43112 | A\% 0 |
| 59 | Bhavalri | 2,107 112 |  | 1,264 110 | 9761111 | 2,241 611 | $1 \times 314$ |
| 60 | Multanpur | $9112{ }^{6}$ |  | $17{ }^{6} 1$ |  | 1761 |  |
| , 61 | Mehmedpur | 6881411 | 24382 | 425134 | 10421 | 7737 | 1974 |
| -62 | Medra ... | 1,096 618 | $23 \times 7$ | 1,362 42 | 105611 | 1.4:0 158 | 8290 |
| ${ }_{64}^{63}$ | Motera | 1,36314 <br> 4.330 <br> 11 |  | 1,517 31 |  | 1,747 4 |  |
| 64 65 |  | 4.33111 <br> 51118 | 565911 |  |  |  | 79.0 88 8 |
| 66 | Muthia ... | 1,038 114 | $\dddot{33}{ }^{\prime} \times 10$ | 1,191 0 | 22007 | 1,444 58 | 82 88 4 |
| 67 | Mehmadabad ... | 1,509 7 <br> 1,050 1 |  | 1,083 5 | 593 <br> 181 | 1,676 126 | 2158 |
| 68 69 | Mehemuagar Rakhial | ..  <br> $\cdots$ 1,050 | 27320 | $\begin{array}{llll}564 & 5 & 4 \\ 147 & 8 & 11\end{array}$ | . 161141 |  | 1870 |
| 76 | Rakhial Taraf ... |  | 85 2 6 | + 147811 | $\begin{array}{r}12513 \\ 1,054 \\ \hline 189\end{array}$ |  | 11300 |
| 71 | Rajpur Jupti ... | 219112 |  | 243130 | -mane | 243130 | 200 |

DIX C.
Government villages of the Daskroi Taluka of the Ahmedabad Collectorate.

|  |  |  |  |  |  |  | Total on Cultivation and Waste. | Remayk. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On the cutivation of 1880-91. |  |  | On Waste Lande |  |  |  |  |  |
| JIralt. | Bagatt. | Total Amemment. |  | Jirait. | Bagait | Total. |  |  |
| 0 | 10 | 12 | 12 | 13 | 14 | 15 | 16 | 17 |
| Rs. 8 n | Re. an | Re. a. | Res. ${ }^{\text {an }}$ | Rs. a | Rs. a. | Re. a. | Rs. ${ }^{\text {a }}$ |  |
| 1,309 4 | 6664 | 2,511 8 | ...0.0 | 46512 | ....'* | 46512 | 2,977 4 |  |
| 8488 | 18 0 | 8668 | ...** | 1578 | - | 1578 | 1,024 0 |  |
| 1,440 12 | 21012 | $\begin{array}{r}18,5 \div 9 \\ \hline 1\end{array}$ | 694 | 3010 | 40 | 3708 | 3,959 12 |  |
| 7788 | 4558 | 1,234 0 | . | 20112 | ...... | 20112 | 1,435 12 |  |
| 4,456 12 | 56712 | 7,002 4 | 70 | 3854 | . | 3924 | 7,394 8 |  |
| 1,042 12 | 84 | 1,319 12 | 260 | 1914 | 50 | 2224 | 1,542 0 |  |
| 6268 | 6858 | 1,226 8 | 24 | 2580 | 7.0 | 267 4 | 1,493 12 |  |
| 4698 | 158 | 4904 |  | 34 | ...... | 34 | 4938 |  |
| 90612 | 1288 | 1,038 12 | 712 | 568 | 48 | 6812 | 1,107 8 |  |
| 1,808 12 | 2208 | 2,599 8 | 2360 | 39012 | 1212 | 6398 | 3,239 0 |  |
| 8078 | 538 | 1,093 8 | 2330 | 3600 | - | 5930 | 1,686 8 |  |
| 52010 | 1512 | 6708 | 6212 | 63512 | 58 | 7040 | 1,374 8 |  |
| 4554 | 2,250 12 | 2,777 8 | 224 | 2528 | 2,251 12 | 2,526 8 | 5,304 0 |  |
| 3008 | 2194 | 1,190 4 | 90 | 1208 |  | 1298 | 1,319 12 |  |
| 4398 | 14.0 | 79612 | 754 | 27012 | 80 | 254.0 | 1,150 12 |  |
| 1,063 0 | 13312 | 1,7718 | 22612 | 827 | 164 | 1,079 . 4 | 2,841 12 |  |
| $960 \quad 4$ | 550 | 1,115 0 | 2408 | 68412. |  | 92.4 | 2,040 4 |  |
| 1,410 4 | 1184 | 1,881 8 | 2030 | 4504 | 130 | 666 | 2,54712 |  |
| 2,260 12 | 2450 | 2,746 4 | 1910 | 43312 | $\cdots$ | 62412 | 3,371 0 |  |
| 8180 | $16 \quad 4$ | 8358 | 190 | 9212 | 154 | 127.0 | 9628 |  |
| 1,117 12 | 3512 | 1,580 8 | 804 | 1760 |  | 256 | 1,838 12 |  |
| .9128 | 1074 | 1,395 0 | 1184 | 354.0 | 88 | 48012 | 1,875 12 |  |
| 6318 |  | 78812 | 88 | 834 | ...... | 9112 | 8808 |  |
| 6354 | 42712 | - 1,003 8 |  | 36.0 | . 7 | 3718 | 1,041 0 | - |
| 42712 | 8080 | - 1,235 12 | 140 | 1228 | 4712 | 1844 | 1,420 0 |  |
| 7812 | $\cdots$ | 7812 | ...... 12 | $\cdots$ | ...... | -102 12 | 7812 |  |
| 4104 | ${ }_{10}^{1} 0$ | 6448 | 22112 | 3810 | ; | 60212 | 1,2474 |  |
| 2708 | 168 | 4624 | 408 | 23712 | 10 | $\bullet 2794$ | 7418 | -Farmed to |
| 76212 | 2820 | 1,300 0 | 9012 | 1370 |  | 2304 | 1,530 4 | Hussun- khan Ris- |
| 1,877 12 | 448 | 2,377 12 | 3512 | 2014 | 74 | 2444 | 2,622 0 | ${ }_{\substack{\text { khan Rig } \\ \text { ealdar for }}}$ |
| 1094 | 514 | 1608 | ...... | -.... | ...... | ¢0.7 | 1608 | B5. 473 -4 |
| 2,191 0 | 1548 | 2,577 4 | - 198 | 5090 | - | 5288 | 3,105 12 |  |
| 8170 | 318 | 190212 | 124 | 960 | 90 | 1174 | 1,020 0 |  |
| 80512 | 69 | 1,223 4 | 154 0 | 3185 | 28 | 5220 | 1,745 4 |  |
| 1,244 8 | 3812 | 1,546 8 | 1024 | 1,295 0 | 3412 | 1.4320 | 2,978 8 |  |
| 5698 | 5058 | 1,075 4 | $\cdots$ | 1450 | ...... | 1450 | 1,220 4 |  |
| 7224 | 25412 | 1,167 0 | $\therefore 2700$ | 25612 | ...... | 52612 | 1,693 12 |  |
| 48012 | $\cdots$ | 48012 | - | 2212 | - | 2212 | 5088 |  |
| 43812 | 2804 | 738.8 | 140 | 18 | ...... | 158 | 748.0 |  |
| 640 | 1488 | 218.8 | ......7 | ...7. | ...... | $\cdots$ | $212{ }^{\circ} 8$ |  |
| 2,975 0 | 44.4 | 3,149 0 | 770 | 5120 | .... | 5890 | 3,738 0 |  |
| 8970 | 18912 | 1,160 12 | 190 | 2160 | 3112 | 26612 | 1,427 8 |  |
| 8,307 12 | 19612 | 4,54612 | 5812 | 2118 | 10 | 2714 | 4,818 0 |  |
| 4970 | 9512 | ${ }^{5091} 12$ | 2720 | 3498 | ..... | 6218 | 1,221 4 |  |
| $\begin{array}{r}784 \\ 1788 \\ \hline 78\end{array}$ | 1,620 4 | 2,477 8 | -1.0. | 2444 | 2874 | 3318 8: | 2,809 0 |  |
| 1,798 74 18 | 3188 | 2,172 8 | 330 | 17212 | ...... , | 20512 | 2,378 4 |  |
| 7,74-8 | 75 | 154.8 |  | 100 |  | 100 | 1648 |  |
| 1,712 87 88 | 7988 | 2,793 4 | 4548 | 9450 | 218 | 1,421 0 | 3,604 4 |  |
| 87 789 | 750 | 1640 | ...... | -..... | .... | $\cdots$ | 1640 |  |
| 7990 | 1640 | 2,183 4 | 3450 | 26212 | 4412 | 6528 | 2,785 12 |  |
| $\begin{array}{r}2588 \\ \hline 18\end{array}$ | 640 | 8680 | 2168 | 1440 | - | 3608 | 1,228 8 |  |
| 1,333 8 | 4868 | 1,888 0 | 2312 | 4748 | 80 | 5064 | 2,394 4 |  |
| 1,3968 1,597 | 912 | 8024 | 15412 | 1350 | 140 | 33312 | 1,106 0 |  |
| 1,237 8 | 13712 | 1,472 4 | 120 | 2988 | 70 | 3178 | 1,739 12 |  |
| 1,200 12 | 6.3112 | $\begin{array}{ll}2.481 & 8 \\ 1.470\end{array}$ | 1070 | 29812 | 194 | 3550 | 8,836 8 |  |
| 79818 17900 | 25 <br> 8 | 1,470 8 | 30812 | 51512 | 78 | 8320 | 2,302 8 |  |
| 1,390 8 | 53 104 | 1,373 1,689 | $\cdots$ | $4+58$ | $\ddot{8}$ | 4458 | 1,819 0 |  |
| 1,071 18 | 10412 | 1,6646 8 | 52910 | 1,109 0 | 84 | 1,646 14 | 3,313 0 |  |
| 1,561 19 | 2560 | 2,006 10 | 4014 | 3474 | ...... | 3882 | 2,394 12 |  |
| 20 568 5 | 75 8 | 260 | is | 310 | - $\cdot$.... | 310 | 570 |  |
| 558 | 75 <br> 15 | 8310 | 134 | 3314 | - | 3448 | 1,175 8 |  |
| 1,169 0 | 1458 | 1,396-8 |  | 2058 | 30 | 3038 | 1,700 0 |  |
| 18964 | 15112 | 1,394 8 | 3012 | 2418 | 140 | 286 | 1,680 12 |  |
| 1,947 0 | $\begin{array}{ll}965 & 4 \\ 973 & 0\end{array}$ | 3,641 4 | 5084 | 7898 | 1044 | 1,408 0 | 5,043 4 |  |
| 1188 | 9730 | 1,044 0 | 320 | 518 | 1230 | 2068 | 1,300 8 |  |
| 1,321 14 | $15 \pm 10$ | 1,556 12 | 460 | 2724 | 158 | 33312 | 1,890 8 |  |
| 98012 | 7150 | 1,911 4 | 510 | 178 | 424 | 2714 | 2,188 8 |  |
| 5094 | 2588 | - 95812 | 494 | 29912 | 112 | 35018 | 1,303 8 |  |
| 2034 | 138 | 3678 8 | $\cdots \cdots$ | ...... | .... | $\cdots$ | 3678 |  |
| 1,784 0 | 1,168 8 | 3,053 8 | 70 | , 21112 | 2112 | 8408 | 3,294 0 |  |
| E6S 18 | 34 | 2090 | *....' |  | ...... | **.'. | 2680 |  |

APPENDIX 0

-continued.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|c|}{} \& \multirow{3}{*}{$$
\begin{aligned}
& \text { Total on } \\
& \text { Cultivation and } \\
& \text { Wasta. }
\end{aligned}
$$} \& \multirow{3}{*}{Remarke.} <br>
\hline \multicolumn{3}{|c|}{On the Culturtton of 1800-9s.} \& \multicolumn{4}{|c|}{On Wente Landet} \& \& <br>
\hline Jtrath \& \%ardit \& Total Ammasment. \& silo \& Jurat. \& Bagait \& Total Aspesement. \& \& <br>
\hline 9 \& 10 \& 11 \& 12. \& 13 \& 14 \& 15 \& 16 \& 17 <br>
\hline Rs. a \& $\mathbf{R B}_{3} 2^{2}$ \& Rs. ${ }^{\text {a }}$. \& R8. a. \& Rs, a. \& Rs. a- \& Rs. ar \& Re. a. \& <br>
\hline 1,169 0 \& 76 \& 1,312 4 \& 3012 \& 1164 \& $32^{-1}$ \& 179 \& 1,491, 8 \& <br>
\hline 6514 \& 75.4 \& $\begin{array}{r}726 \\ \hline 8 \\ 2436 \\ \hline\end{array}$ \& 78
2380 \& 212
814
8 \& 378 \& 219
780
78 \& 946

3,816 \& <br>

\hline | 1,107 |
| :--- |
| 786 |
| 8 | \& | 5788 |
| :--- |
| 6048 | \& | 2,436 |
| :--- |
| 1,370 | \& 2380 \& 514

132
12 \& \& 13212 \& 3,603 4 \& <br>
\hline 1,708 4 \& 4834 \& 2,237 4 \& $58 \times 8$ \& 1058 \& 58 \& 1678 \& 2,404 12 \& <br>
\hline 1,298 0 \& 74.0 \& 1,485 4 \& 120 \& 1408 \& 80 \& 568 . 8 \& 2,053 12 \& <br>
\hline 812 3 \& 112 \& 94212 \& 41812 \& 3914 \& - 8 \& 8108 \& 1,752 12 \& <br>
\hline 4980 \& 404 \& 84512 \& 198 \& 62

289
8 \& \& $\begin{array}{r}84 \\ 380 \\ \hline 80\end{array}$ \& 1, 3240 \& <br>

\hline | 808 |
| :--- |
| 480 | \& | 11 |
| :--- |
| 60 |
| 8 | \& ${ }_{601}^{944} 8$ \& $\begin{array}{r}89 \\ \hline 168 \\ \hline 168\end{array}$ \& 289

444
4 \& $\begin{array}{ll}0 & 12 \\ 3 & 0 \\ 3 & \end{array}$ \& 380
615
8 \& 1,324 1,2 \& <br>
\hline 460

868120 \& $\begin{array}{r}60 \\ \hline 1,441 \\ \hline\end{array}$ \& $\begin{array}{r}601 \\ 2,445 \\ \hline\end{array}$ \& \begin{tabular}{ll}
168 \& 4 <br>
163 <br>
\hline 8

 \& 

444 <br>
399 <br>
\hline 8
\end{tabular} \& 25812 \& 82112 \& 3,267 0 \& <br>

\hline 7208 \& 2110 \& 1,309 0 \& 3040 \& 8004 \& 160 \& 1,120 4 \& 2,429 4 \& <br>
\hline 2,087 0 \& 2314 \& 2,478 8 \& 218.0 \& 1,823 5 \& 2264 \& 8,267 8 \& 4,746 8 \& <br>
\hline 6940 \& 228 \& 8398 \& 708 \& 5458 \& 414 \& ${ }_{6}^{657} 4$ \& 1,496 12 \& <br>
\hline 2,644 0 \& 334 \& 2,8178 \& 1078 \& ${ }^{616} 4$ \& \& \& \& <br>
\hline ${ }^{2} 955$ \& 712 \& 1,132
2
2930 \& 95
96
267 \& $\begin{array}{r}408.18 \\ 237 \\ \hline 8\end{array}$ \& $\begin{array}{rr}5 & 8 \\ 408 \\ 40\end{array}$ \& 60912

545 \& | 1,642 |
| :--- | :--- |
| 8,475 | \& <br>

\hline 1,497 1,30718 \& ${ }_{463} 178$ \& | 2,930 |  |
| :--- | :--- |
| 8,262 | 4 | \& | 267 |
| :--- |
| 147 |
| 8 | \& $\begin{array}{r}237 \\ 445 \\ \hline 18\end{array}$ \& 40

20

4 \& 613.8 \& | 2,475 |
| :--- |
| 2,87 |
| 8 | \& <br>

\hline 1,249 4 \& 4818 \& 2,773 12 \& 3348 \& 1,633 4 \& 204 \& 1,988 0 \& 4,761 12 \& <br>
\hline 1,564 0 \& 1,821 12 \& 3,617 0 \& 7314 \& 9,177 8 \& 1,149 4 \& 5,058 0 \& 8,0750 \& <br>
\hline ${ }^{915} 4$ \& 80 \& 1,065 8 \& 2612
188 \& 391-0 \& \& \& \& <br>

\hline 1,005 8 \& 7874 \& 2,214 878 \& | 1,223 |
| :--- | \& 1474 \& ........ \& 1,370 12 \& 3,585

377

0 \& <br>

\hline | 207 |
| :--- |
| .884 |
| 8 | \& ${ }_{16818}^{184}$ \& 377

1.369 \& $4{ }^{423} 8$ \& 2280 \& 10 \& $\bigcirc 652$ \& 2,021 8 \& <br>
\hline 2,019 6 \& 2610 \& 3,308 2 \& 4410 \& 55814 \& 240 \& 1,323 14 \& 4,632 0 \& <br>
\hline 1,689 14 \& 16810 \& 1,8588 \& ${ }^{-18}$ \& \& \& $\begin{array}{rrr}40 & 0 \\ \text { sor } & 4\end{array}$ \& \& <br>
\hline 1931
157
15 \& 72
87
87 \& $\begin{array}{r}1,249 \\ 844 \\ \hline 20\end{array}$ \& .$^{26} 8$ \& 2704 \& 48
$\cdots$ \& Sol 4 \& 1,551
244

0 \& <br>
\hline $\begin{array}{r}157 \\ 1,483 \\ \hline 8\end{array}$ \& 87
85
854

8 \& | 244 |
| ---: | :--- |
| 2,678 | \& $\begin{array}{ll}1 & 8\end{array}$ \& 1214 \& 90 \& $\cdots 13112$ \& 2,810 0 \& <br>

\hline 1,099 0 \& 2108 \& 1,309 8 \& . \& 31118 \& \& 31112 \& 1,631 4 \& <br>
\hline 1874 \& 25212 \& 4400 \& - \& \& 100. 8 \& \& \& <br>
\hline 2,2;8 0 \& 26418 \& 2,548 12 \& ...... \& 296
178

172 \& ...... \& | 296 |
| :--- |
| 178 |
| 12 | \& $\begin{array}{r}2,839 \\ 786 \\ \hline 8\end{array}$ \& <br>

\hline - 58512 \& 400 \& 60712
98
88 \& - \& 17812 \& ....... \& ${ }^{178} 12$ \& $\begin{array}{r}7868 \\ 98 \\ \hline 8\end{array}$ \& <br>
\hline - $\begin{array}{r}80 \\ 844 \\ \hline\end{array}$ \& $\cdots{ }^{\cdots \cdots} 40$ \& 988
813
81 \& \& 1918 \& $\cdots$ \& $\cdots 1964$ \& 7098 \& <br>
\hline ${ }_{447} 4$ \& 24.0 \& 9088 \& 3558 \& 170 \& 30 \& 5288 \& 1,437 4 \& <br>
\hline 324 \& 1818 \& 490 \& ..... \& \& $\cdots$ \& $\cdots{ }^{-1.7} 8$ \& \& <br>
\hline 71912 \& $5{ }^{53} 4$ \& ${ }^{773} 0$ \& ... \& $\begin{array}{r}948 \\ .779 \\ \hline 8\end{array}$ \& 2194 \& $\begin{array}{r}94 \\ 988 \\ \hline 988\end{array}$ \& $\begin{array}{rr}867 \\ 4 \\ 4,911 & 0\end{array}$ \& <br>
\hline 2,871
3,73 \& $\begin{array}{r}1,041 \\ \hline 254 \\ \hline\end{array}$ \& 3,91812

4,99018 \& \& - 7790 \& $\begin{array}{r}219 \\ 80 \\ \hline\end{array}$ \& 1,378 98 \& | 6,369 |
| :--- |
| 8 | \& <br>

\hline 3,736 4 \& 2548 \& 4,990 12 \& 494.8
3312 \& 864
825

38 \& $\begin{array}{ll}80 \\ 20 \\ 24 & 4\end{array}$ \& $\begin{array}{r}1,37812 \\ 383 \\ \hline 8\end{array}$ \& | 6,369 |
| :--- |
| 2,046 | \& <br>

\hline | $-1,156$ |  |
| ---: | :--- |
| 2,554 | 8 | \& 21012

2078 \& | 1,863 |
| :--- |
| 3,168 | \& $\begin{array}{r}3312 \\ 1818 \\ \hline 8\end{array}$ \& 325

1,811
1 \& 1164 \& 1,508 18 \& 4,677 0 \& <br>
\hline 2,077 18 \& ${ }_{46} 4$ \& 1,188 8 \& . 58 \& 1,135 8 \& ...... \& 1410 \& 1,260 8 \& <br>
\hline 1,052 12 \& \& 1,052 12 \& \& 2374 \& ..... \& ${ }^{237} 8$ \& 1,290 0 \& <br>
\hline 1154 \& 488 \& ${ }^{187} 0$ \& ...... 9 \& 81
68
6 \& $\because \cdots$ \& 3
8
80 \& 170-0 \& <br>

\hline 3160 \& 1830 \& 637 \& 29.8 \& | 61 |
| :--- | :--- |
| 44 |
| 8 | \& \& \& \& <br>


\hline $\begin{array}{r}16218 \\ 8,963 \\ \hline 0\end{array}$ \& | 108 |
| :--- |
| 408 |
| 0 | \& $\begin{array}{r}42812 \\ 4,048 \\ \hline\end{array}$ \& $\begin{array}{r}131 \\ 163 \\ \hline 8\end{array}$ \& \& \[

$$
\begin{array}{r}
70 \\
104
\end{array}
$$
\] \& 182

1,169 \& $\begin{array}{r}611 \\ 5,217 \\ \hline 8\end{array}$ \& <br>
\hline 1,23,536 $\quad 0$ \& 32,963 12 \& 1,85,225 14. \& 13,839 8 \& 41,116 14 \& 5,449 0 \& 59,905 6 \& 2,45,191 4 \& <br>
\hline
\end{tabular}

W. '். PEDDER,

Survey Settlement Officer, Gujarát.

No. 226 of 1861.
From
S. MANSFIELD, ESQUIRE,

Revenue Commissioner, N. D.;
To
A. ROGERS, Esquirí,

Collector of Ahmedabad.
Revenue Commissioner's Office, Camp Bombay, 31st January 1861.
Sir,
I have the honour to acknowledge the receipt of your letter No. 1271, dated 27th ultimo, with accompaniments, and to state that I am unable to hand up Captain Prescott's suggestions for the revision of the assessment of the Pargana Daskroi until I am put in possession of the figures realizable on account of the badadit lands including rice. I shall, therefore, feel obliged by your reporting them as soon as the general settlement is effected under instructions already issued by me by telegraph.
2. Adverting to your 21 st paragraph, I beg to observe that on the revision of the assessment of a district by the revenue survey it is not usual to make any allowances in favour of lands of the sort therein alluded to, unless a provision to the contrary should exist in the shape of leases, agreements, \&c.
3. The formal sanction of Government for the introduction of the new rates need not be awaited. The instructions issued by me are sufficient.

> I have, \&c.,
> S. MANSFIELD, Revenue Commissioner, N. D.
$\qquad$ -

No. 91 op 1861.
Ramod, 5th February 1861.
Forwarded to the Superintendent of the Revenue Survey and Assessment, Gujarat, with a request that he will have the goodness to supply the Collector with the information called for by the Revenue Commissioner at his earliest convenience.
A. ROGERS,
Collector.

No. 783 or 1861.

## To

Captain C. J. PRESCOTT,
Superintendent, Revenue Survey and Assessment, Gujarát.

> Ahmedabad Collector's Camp Asárva, 29th October 1861.

Sir,
With reference to my endorsement No. 91, dated 5th February last I have the honour to request you will have the goodness to expedite the transmission of the information therein called for with regard to the bágáit and rice lands in the Daskroi Pargana.

I have, \&c.,
L. ASHBÚRNER, Acting Collector.

## No. 4, ow 1862.

From

Captan C. J. PRESCOTT,

Superintendent of Revenue Survey and Assessment, Gujarát ;
To

L. REID, Esquire,<br>Collector of Ahmedabad.

Camp Munsár, 16th January 1862.

## Sir,

With reference to your letter No. 783, dated 29th October last, I have the honour to forward, in the form directed by the Revenue Commissioner, N. D., a statement prepared from the jamábandi papers, in which the survey settlement is contrasted with the amount of revenue which under the late system would have been levied from the Government lands of the 119 settled villages of the Daskroi Pargana of your collectorate for the year Samvat 1917, A.D. 1860-61.

This statement contains the real amount of assessment imposed by the survey on the different kinds of Government lands, the estimated figures of which were given in Statement B which accompanied my report No. 128, dated 14th December 1860, on the revision of assessment in Daskroi.
2. It must, however, be remembered that the maximum rates proposed by me were on the recommendation of the then Collector

- Vide letter from Collector to Assistant Settlement Officer, No.1282, December 31, 1860. will be here explained. considerably altered by the Revenue Commisssioner, N. D., and consequently that a material difference will be observed between the estimated amounts of assessment and those now given; other discrepancies

3. The contrasted results of the statements are as follows :-

Revenue according to the late system from Government cultivated lands for the year Samvat 1917, A.D. 1860-61:-

| Rico Landa. | Dry.crop Landa. | Garden Landa, | Total. | Average Collection for ten years from Sampat 1905 to Samvat 1914. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{ccc} \text { Rs. } & \text { a. p. } \\ 18,915 & 8 & 0 \end{array}$ | $\begin{array}{ccc}\text { Rs } & \text { a. } & \text { p. } \\ 1,42,959 & 2 & 10\end{array}$ | Rs. B. p <br> 39,094 10 4 | $\begin{array}{ccc}\text { Rs. } & \text { a. } & \text { p. } \\ 2,00,969 & 5 & 2\end{array}$ | $\begin{array}{ccc}\text { Rs. } & \text { a. } & \text { p. } \\ 1,74,142 & 3 & 3\end{array}$ |

Assessment of Government cultivated lands according to the survey settlement for Samvat 1917, A.D. 1860-61 :-

| Rice Lande, | Dry-crop Lande. | Garden Lande | Total. |
| :---: | :---: | :---: | :---: |
| $\begin{array}{ccc} \text { Rs. } & \text { a } & \text { p. } \\ 29,326 & 2 & 0 \end{array}$ | $\begin{gathered} \text { Rs. } \\ 1,23,536 \end{gathered}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 32,363 & 12 & 0 \end{array}$ | $\begin{array}{rrr} \text { Rs. } & \text { a. } & \text { p. } \\ 1,85,225 & 14 & 0 \end{array}$ |

Survey assessment less or more than the assessment under the late system :-

| Less |  | Rice Landm | Dry-crop Lands. | Garden Lande | Total. | A verage Collection for ten years. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ris. a. ${ }_{\text {a }}$ | $\begin{array}{ccc} \hline \text { Rs. } & \text { a. } \mathrm{p} . \\ 19,423 & 0 & 10 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \mathrm{p} . \\ 6,730 & 14 & 4 \end{array}$ | $\begin{array}{lll} \text { Rs. } & \text { 2. p } \\ 15,743 & 7 & 2 \end{array}$ | $\begin{gathered} \text { Rs. } 2 \quad \mathrm{p} \\ \ldots \ldots \end{gathered}$ |
| More | . | 10,410 $10 \quad 0$ | ...... | ...... | ...... | 11,083 $10 \quad 9$ |

Survey assessment of waste Government land :-

| Rice Lande. | Dry-crop Lands. | Garden Lande. | Total. | Survey Kamal of weate and cultivated. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{ccc} \text { Rs. } & \text { a. p. } \\ 13,339 & 8 & 0 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 41,116 & 14 & 0 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { e. } & \text { p. } \\ 5,449 & 0 & 0 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ \cdot 59,905 & 6 & 0 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { B. } & \text { p. } \\ 2,45,181 & 4 & 0 \end{array}$ |

4. An abstract of the vasuilbáki patrak or jamábandi papers of the different villages is here appended:-

5. Some explanation of the figures here given is necessary :-
(1). The increase Rs. 10,410-10 in the assessment of rice lands arises from two causes : first, that rice land, irrigated from wells and producing second crops of wheat, barley, \&c., has by the survey been classified and assessed as rice land, whereas under the late system it was called garden land, and its assessment has consequently been shown in column

6 of the accompanying statement. Secondly, that a good deal of land converted into rice since the bighoti settlement of Messrs. Jackson and Fawcett, and which has hitherto paid only dry-crop assesssment, has now by the survey been classified and assessed as rice.
(2). In certain villages there were cesses, such as plough cess, the revenue from which, as they are paid by each cultivator on his entire holding, cannot be distributed among the different kinds of land in his occupation. In some cases these cesses were paid from the produce of alienated as well as from that of Government lands. In order to make the figures in column 7 of the stateqent tally with those given in the vásúlbáki patraks as the revenue of Government lands it was necessary to enter this item of revenue in column 5, and the assessment of dry-crop lands is thus shown as being larger than it really was under the late system. The amount of these cesses, Rs. 363-8-4, which falls upon alienated lands on an average of five years has been separately calculated and imposed as a permanent quit-rent upon those lands. This amount must, therefore, be deducted from the total decrease of assessment caused by the settlement, and it must be understood that although the balance Rs. 2,552-1-6 is shown as part of the lassessment of dry-crop lands, yet a portion of it properly belongs to that of garden or rice lands.
(3). You will notice a difference of Rs. 1,556-14-3 between the assessment of Government cultivated lands in column 11 of the accompanying statement and the same assessment in the above abstract of the vásúlbáki patraks. The reason of this is that a great number of wells have been constructed in Government lands within the last few years, and the owners of these wells have received leases promising that the irrigated lands shall for a certain number of years be assessed only at dry-crop rates. There is also some land entered as Government which it has been decided by the Collector or the Alienation Department shall be enjoyed free or at low rates during the life-time of certain parties. In all these cases the lands have been assessed in the survey registers at the full rate, and the difference between that and the reduced rate is deducted from the amount to be collected according to the 15th Blane's Form.
(4). For convenience sake I have given above the figures showing the settlement of cesses, \&c., upon alienated lands. A separate report upon this subject will be submitted; there is no need, therefore, to explain the figures here.
6. In making the settlement, the rates proposed by Mr. Rogers and sanctioned by Mr. Manstield have been strictly adhered to. The people generally are exceedingly well satisfied with the new rates, and except in a few villages nearly all of the rayats at the jamábandi requested that their names might be recorded as agreeing to continue their existing holdings. A great many waste numbers were also taken up at jamíbandi. Only in the following cases have I any reason for suspecting that the rates are too high.
7. You will notice that in one or two villages on the banks of the Sábarmati, especially in Gyaspur (No. 13), the survey assessment is considerably above the estimate originally given by me. The reason of this is that a great portion of the lands of these villages consists of bhatha or alluvial deposits from the river (vide paragraph 11 of the report), which not usually containing permanent wells was classed as dry-crop, and the estimate made accordingly. But on making the settlement I found that the dry-crop rate did not nearly correspond with the value of these lands, and consequently (in accordance with paragraph 4 of letter dated 11th April 1860 from the Revenue Commissioner, N. D., to my address) they were assessed at bágait rates. I do not think that the rates thus imposed are too heavy, but as I had not time for a minute personal examination of the lands in question it may possibly be found that they have been assessed too highly. The present season's experience will probably enable you to judge of this, and if you think it necessary the rates can easily be reduced.
8. The 4 following villages are isolated in the Gaikwarr's pargana of Kadi, north of the rest of the district: Dholakua and Indrora, and Sábáapur and Usmanábád lying respectively close together:-


I originally proposed for Dholakua and Indrora a maximum rate of Rs. 2-8-0, and for the other 2 villages of Rs. 2-4-0. These rates were raised by Mr. Rogers to Rs. 2-12-0. The villages are at a considerable distance from Ahmedabad; the soil in them is usually poor ; in the first 2 the water is at such a depth from the surface that wells for irrigation cannot be used, and the population consists chiefly of Kolis, who are very poor, cultivate very badly, and who under the late system paid as assessment only a light plough-tax. At jamábandi these people complained extremely of the increase of their assessment, and refused to take up their fields, and I am informed that this year a great deal of the land is waste. This is a case in which the late system of caste rates renders it very difficult to make a satisfactory settlement. There are in 3 of these villages a few families of Kanbis who paid considerably higher rates than the Kolis, yet who have in Sábáspur and Usmanábád considerably improved their lands by digging wells, \&c. These people can well pay the present survey rates; but I think it is doabtful whether the Kolis can do so, and as the villages are similarly situated, the rates cannot well be lowered in Sábáspar and Dholákua and retained at their present pitch in the other two villages. If, after the experience of the present season, you find that the people generally decline to take up their lands, I would recommend the reduction of the maximam dry-crop rate in all 4 villages to Rs. 2-i-0.
9. The village of Kubadthal is held on the narva tenure, and is the only village in your collectorate in which that tenure still exists. I forward herewith a report, dated 10th May 1861, by my Assistant, Mr. Pedder, on the subject of this village for your perusal and that of the Revenue Commissioner, N. D. The plan of settlement proposed by Mr. Pedder was adopted, and I have the honour to request that it may be sanctioned. The principle is that of taking the entire survey assessment of all the narvádári lands, and distributing this amount among all the khátás of the different bhágdárs according to the share which each holds in the narva. Government will thus annually receive the entire survey rental, whether any of the lands are waste or not, and the constitution of the village community will not be in any way interfered with. I would also request that the proposals contained in Mr. Pedder's report, paragraphs 26 and 30, may be sanctioned.
10. The quantity of waste land included in survey numbers partly cultivated (and the assessment of which is of course excluded from columns 8 to 11 of the accompanying statement) is acres 8,907 39, assessed at Rs. 21,253-2-0. As comparatively very few numbers were thrown up at jamábandi on account of waste land included in them, I think it may fairly be estimated that the net increase of assessment in'the present season arising from the cultivation of these lands will be not less than Rs. 10,000 . Numbers hitherto entirely waste have also been very largely taken up, one person alone, the head of the sect calling themselves followers of Swámi Náráyen, having taken up waste land in three villages to the amount of Rs. 1,055. The increase from this source also will, I think, be not less than Rs. 10,000 . This will bring the revenue from Government cultivated lands in the present season to about lis. 2,06,000, or an increase of about Rs. 5,000 above the revenue of the last year under the late

## 115

Revenue according to the late system for 1860-61, Hs. 2,00,969-5-2.
Do. on an average of preceding ton years, Rs. 1,74,142-3-8.
system. But besides this it must be recollected that the great difference of Rs. 26,827-1-11 between the average collections during ten years preceding 1860-61 and the reyenue for that year under the late system is almost entirely due to the great quantity of waste land which has within the last two years been taken up in anticipation of the settlement, in order that the persons found in occupation might get themselves at once entered as survey occupants. If the above estimates are correct, and I have every confidence that they will be found so, the increase in the revenue derived from Government cultivated lands in Daskroi caused by the survey settlement in the first year of its operations may be set down at about Rs. 20,000,-a result which, as it is accompanied by an actual decrease in the weight of assessment generally and by all the other benefits of the improved system may, I hope, be considered satisfactory. 'It must; however, be remembered that last monsoon was peculiary unfavourable, only 17 inches of rain having fallen instead of the average of about 35. This will, of course, have a prejudicial effect on the remenue, and may, I fear, render some remissions necessary, especially in the case of rice lands.
11. As, with the exception noticed in the 7th and 8th paragraphs, there will be, I think, no need of any alteration in the rates which have been adopted, 1 think that the usual guarantee of the permanence of the rates for thirty years may now be applied for from Government.
12. I beg to recommend to your favourable notice Ochhavram Haridás, the present Mámlatdár of Daskroi. He took charge of his district in the middle of the jamabandi, and without having any previous practical acquaintance with the survey system. He took great pains to learn the system, and rendered me much asşistance.
13. The delay that has occurred in forwarding this report is because $I$ I thought it desirable that all the papers connected with the settlement should be thoroughly revised before the figures were submitted for the orders of Government.

$$
\begin{gathered}
\text { I have, \&c., } \\
\text { C. J. PRESCOTT, Captain, } \\
\text { Superintendent of Revenue Survey and Assessment, Gujarát. }
\end{gathered}
$$

No. 25 or 1862

## From

To

## Captan PRESCOTT,

> Superintendent; Gujarạt Revenue Survey ;

- B. H. ELLIS, Esquire,

Revenue Commissioner, N. D.
Surat, 8th August 1862.

## Sir,

I have the honour to acknowledge the receipt of your letter No. $187{ }^{7}$ of the 29th ultimo, and to inform you, in reply that $I$ am of opinion it is very desirable that the guarantee of the permanency of the revised rates should be given as soon after the assessment of a district is completed as will admit of superior authority judging of their suitability.
2. The delay of the guarantee has a tendency to make the rayats unsettled and impatient of any increase in the rates of assessment, which (in a country where caste rates have prevailed) is, in many cases, inevitable when an equitable. assessment, based on the value of the soil, is introduced.
3. Again, before the rates are sanctioned at all, superior authority is furnished with such minute information in the comparative and other statements, that the effect of the settlement may be calculated on within a few hundred rupees.
4. There is only one reason for not granting the guarantee in Daskroi and Jetalpur. This is the mode of settlement which has been adopted for permanent bhatha or river lands, in which water can always be obtained close to the surface, and which are extremely valuable. These lands are irrigated by either pucka wells built at a cost of from Rs. 25 to 60 , and which usually last seven or eight years, or by kutcha wells which are merely holes dug every year (except when the land has a rotation of dry crops), at a cost Rs. of 3 or 4.
5. According to Mr. Rogers's settlement, these lands were assessed primarily at the dry-crop rates of the villages in which they are situated; then those of them which are irrigated by pucka wells were assessed at permanent bágáít rates, and those irrigated by lutcha wells by a rate of Rs. 12 on each water-bag actually used, in addition to the dey-crop rate. The effect of this mode of settlement is that-

1st.-Lands in which pucka wells did not happen to exist at the time of settlement were, assessed at much less than their real value.
$2 n d$.-The revenue of the bhatha lands has a tendency to lensen every year, because it is, of coutse, the interest of the people to convert the kutcha wells into pucka ones, when, of course, only the dry-crop rate and not the kos rate can be levied. . . .'
$3 r d$.-The pucka wells; the lands under which were assessed at permanent bagdit rates, will all have, probably", fallen in in the next twenty years, when of course the owner of each well, as it falls in, petitions to be assessed at only dry-crop rates, so that, before the end of the guarantee, the whole of these lands, the most valuable of any, will probably be paying merely dry-crop rates.
6. To reniedy this it was proposed (vide correspondence marginally

Mr. Pedder to Captain Prescott, No. 8 of 9th April 1861, paragraphe 14 to 18 , forwarded to Revenue Commissioner, N. D., with Captain Prescott's letter No. 9 of 9 th April 1861, and Mr. Mansfield'g letter (without number) of 11 th April 1861, paragraph 4, addressed to Captain Prescott.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts.
proposed (vide correspondence marginally
noted) that all bhatha should be directly
assessed at bágait rates, whether pucka
wells actually existed in them or not.
This principle was approved by the
late Revenue Commisssioner, and will
be applied in the settlement of future
districts. districts.
7. It may be worthy of consideration whether the bhatha lands of Daskroi and Jetalpur should not be te-assessed on the same principle. But as the sum at stake is inconsiderable, and these continual revisions are very bad, perhaps it would be better to let it alone.
> C. ${ }^{\text {I }}$. PRESCOTT,

> Superintendent, Revenue Survey.

## Revenul Departuent.

# The Honovrable A. D, Robertson, Acting Chief Secretary to Government, Bombay. 

Poona, 21st August 1862.
Sir,

[^5]I have the honour to reply to paragraph 6 of the Government Resolution No. 5167, dated 3rd December last.

## 2. Captain Prescott, who was referred to, states:-

## "It is very desirable" (to end of paragraph 3 of Captain Prescott's letter

 No. 25 of 6th August 1862).3. Of the truth of these general principles there can be no doubt, but on proceeding to apply them to the settlement of Daskroi and Jetalpur, Captain Prescott finds reason to question the expediency of confirming a portion of the settlement sanctioned experimentally.
4.- I have requested him to report, in detail, on the lands to which he refers, and on receipt of a further report I will submit my opinion whether the time has now come to guarantee the settlements in Daskroi and Jetalpur.
4. Looking to the recent orders in the case of Dhandhuka and to the doubts regarding the two districts above mentioned, I think that it would not be prudent, just at present, to lay down, as a rule for Gujarát, that the permanent

## No. 2954, deted 1st Angrat

 1862. guarantee shall be given on receipt of the first report, though it is quite possible that in some cases the information will be sufficiently explicit, and the principles on which the proposed settlement is bused will be se well recognized as to admit of being inmediately given.I' have, \&c.,<br>B. H. ELLIS, Revenue Comiaissioner, N. D.<br>-

$$
\text { No. } 454 \text { or } 1863
$$

Frox
Captan C. J. PRESCOTT,
Superintendent, Revenue Survey and Assessment, Gujarát;
To

B. H. ELLIS, Esquiry,<br>Revenue Commissioner, N. D.

> Superintendent's Office, Surat, $15 t h$ Septemler 1863,

## $\mathrm{Sir}_{4}$

I have the honour of acknowledging receipt of your endorsement on an

Revenue Commissioner's No. 2578, dnted 5th September 1863. Special extra rate of assessment for the revenue survey numbers in the immediate vicinity of the city Wulls of Ahmedabad, extract (paragraph 6) from a letter from the Acting Collector of Ahmedabad, No. 744, of 19th August 1863, on the subject noted in the margin, and of informing you in reply that although I am respectfully of opinion it is not desirable to put a certain special rate on certain selected numbers of a village so long as such numbers are used for purely agricultural purposes (because it looks like sacrificing a great principle for the sake of a few hundred rupees), I think it is most necessary to withhold the usual guarantee from all the villages immodiately under the walls of Ahmedabad, and to make a distinct stipulation in thèloases declaring that Government reserves to itself the right of raising the maximum rate at any time, and also that in event of any part of a revenue survey number being used hereafter for buikding purposes, or fur stowing timber, grass, grain, or merchandise generally, or if devoted to any other purposes than agriculture, such number will forthwith be assessed at Rs. 100 per. acre, and in case the occupier chooses to throw the number up (under these circumstances), Government will sell the number, giving the present occupant the right of pre-enption at the upset price of Rs. 2,000 per acre.

- 362-30

2. My reasons for thinking that these terms would not only be accepted but considered liberal, is the fact that rich natives in Gujarat pay almost anything for alienated land for building purposes, and I heard of a very amall plot in the city of Surat selling the other day for Rs. 8,000.
3. When Surat, Broach and Abmedabad are connected by rail, and are in daily and hourly communication with Bombay, land in the immediate vicinity of all these towns will be of immense value, because they are the birth places of some of the richest native merchants and traders in the Presidency, who, de. sirous of possessing house property in their native places, will be prepared to give full value for the land, and there seems no reason why the prices obtained by alienees for eligible building sites should not be realized by Government for land sold in " fee simple" for the same purpose.

> I have, \&c.,
> C. J. PRESCOTT, Captain, Superintendent, Revenue Survey, Gujarát.

No. 452 of 1864.
Froit

Captain C. J. PRESCOTT,<br>Superintendent, Revenue Survey and Assessment, Gujarát ;

To

B. H. ELLIS, Esquire,<br>Revenue Commissioner, N. D.

Surat, 17th September 1864.
Sir,

With reference to your endorsment (No. 2006 of the 30th June last) on the

> Resolution of Government on proceedings (Revenue Department) dated 27th of June 1864 No. 2419.

> Increased rates on lands within 500 and 1,000 yards respectively of walls of the city of Ahmedabad.

Resolution of Government noted in the margin, forwarded to me for disposal by the Collector of Ahmedabad, I have the honour of requesting to be informed whether the assessment of bagárit, rice and bhátha lands in the villages therein referred to is to be raised in the same proportion as jirát lands.

> I have, \&c.,
> C. J. PRESCOTT,
> Superintendent.

No. 3022 of 1864.

## Dated the 23rd September 1864 at Poona.

Reply of the Revenue Commissioner, N. D., to No. 452, dated 17th instant, from the Superintendent, Revenue Survey, Gujarát, enquiring whether the assessment of bagait, rice and bhátha lands is to be raised in the same proportion as jiráit lands.

The query is replied to in the affirmative.

No. 463 or 1860:

## From

## Captain C. J. PRESCOṪT,

- Superintendent, Revenue Survey and Assessment, Gujarát;

To

S. MANSFIELD, Esquire,<br>Revenue Commissioner, N. D.

> Superintendent's Office, Camp Kaira, 10th November 1860.

Sir,
In forwarding the accompanying copy of correspondence for your information I have the honour of reporting the completion of the work therein referred to.
2. By this arrangement, the following alterations of villages` will take place in "Daskroi" after the introduction of the revised rates:-.

3. As I find this proposed alteration was not brought to your notice, I now do myself the honour of requesting the favour of your sanction to the same.

4: In the preliminary report on the proposed rates for Daskroi, which is now in course of preparation, I propose to submit a figured statement showing in detail the alterations which will be caused by the above-mentioned amalgamation of detached and mixed villages.

> I have, \&c.,
C. J. PRESCOTT,

Superintendent, Revenue Suryey and Assessment, Gujarát.

No. 165 or 1859.
Frox

A. ROGERS, Esquire,<br>Settlement Officer in Gujarát ;

To

Captain C. J. PRESCOTT,<br>Superintendent, Revenue Survey and Assessment, Gujarát, Surat.

Settlement Officer's Office, Camp Kura, 19th October 1859.

## Sib;

There are a number of small villages, belonging to the Daskroi Pargana in the immediate neighbourhood of Ahmedabad, the lands of which are scattered in detached portions, and very much intermixed with each other. To get rid of the inconvenience to the Collector's Department that must necessarily arise in consequence, I think advantage should be taken of the approaching introduction of the revised settlement to amalgamate the lands in question into a few convenient villages, and shall, therefore, feel obliged by your turning your attention to the subject, and collecting the necessary information, with a view to our finally settling the matter in concert, as soon as possible, in order, if practicable, to have the settlement papers made out from the first in accordance with the new arrangements.

I have, \&c.,
A. ROGERS,
Settlement Officer in Gujarát.
No. 340 of 1859.
From
Captain C. J. PRESCOTtT,
Superintendent, Revenue Survey and Assessment;
To

> A. ROGERS, EsQdire,
> Settlement Officer in,Gujarat.

Superintendent's Ofice,
Camp Surat, 24th Octuber 1853.
Sir,
I have the honour of acknowledging the receipt of your letter No. 165 of the 19th current, and of informing you, in reply,

Directing the amalgamation of detached lands of certain villages of the Daskroi Pargana into convenient neighboaring villages. that I will take the necessary steps for amalgamating, into adjoining villages, those detached lands of other villages of the Daskroi Pargana which are at present isolated from the villages to which they respectively belong.
2. I am sorry to say that the maps and registers of these villages are already completed, and will have to be done over again.
3. In similar cases, I have seen colour used with advantage to distinguish on the map the mixed detached lands of several villages; but this, I fear, would scarcely be sufficient to meet the requirements of the present case.

> (Signed) C. J. PRESCOTT, Captain, Superintendent, Revenue Survey and Assessment, Gujarát. (True Copies.) C. J. PRESCOTT, Captain, Superintendent, Revenue, Survey and Assessment, Gujarát.

No. 2562 oy 1860.

## From

S. MANSFIELD, Esquire,

Revenue Commissioner, N. D.;
To
Captain C. J. PRESCOTT, Superintendent, Revenue Survey and Assessment, Gujarát.

Revenue Commissioner's Office, Camp Erandol, 19th November 1860.

## Sin,

In reply to your letter of thie 10 th instant, No. 463, I have the honour to inform you that I have no objection to the amalgamation of the villages therein mentioned into convenient villages.

I have, \&c.,<br>S. MANSFIELD,<br>Revenue Commissioner, N. D.

$$
\text { No. } 2554 \text { or } 1864 .
$$

Revenue Department:
To
The Honodrable A. D. ROBERTSON, Secretary to Government, Bombay.

Poona, 11th August 1864.
$\mathrm{Sin}_{3}$

In paragraph 18 of my No. 1782 dated 6th June
Ahmedabad Daskroi Settloment. last I promised a report on the reduction of the num. ber of villages around the city of Ahmedabad.
2. After a full consideration of all the circumstances I' have issued instructions for the following arrangements, to which I request the sanction of Government.

| Government. |  |  | Present. |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |

I have, \&c.,
B. H. ELLIS

Revenue Commissioner, N. D.

No. 2585 of 1864.

## Ravener Department. <br> Poona, 13th August 1864.

## Memorandur.

No. 2554, 11th Angast 1864,-reduction in the number of villages in the Ahmedabad Daskroi Pargana

There was a clerical error in the list given in the letter marginally noted. The second item instead of being

should have been
2. Mr. Ellis will be obliged by the Under Secretary correcting the letter acdordingly.

B. H. ELLIS, Revenue Commissioner, N. D.

Revenue Management.
No. 3468.

## Revende Department.

Bambay Castle, 14th September 1864.
Letter from the Revenue Commissioner, N. D., No. 2554, dated 11th Angast 1864, reporting, with reference to paragraph 18 of his letter No. 1782, dated 6th June 1864, the instructions issued by him to reduce the number of villages in the Ahmedabad-Daskroi Pargana.
Resolution-Sanctioned, subject to a report within'a year as to the satisfactory working of the new arrangements.

> H. E. JACOMB,
> Officiating Under Secretary to Government.
D.

From

> W. G. PEDDER, Esquire,
> Survey and Settlement Officer ;

## To

Captain PRESCOTT,
Superintendent of Survey.
Surat, 2nd October 1865.

- Sir,

On reference to the correspondence marginally noted you will recollect that it was decided by Government that lands irrigable

Revenue Commissioner to Government, No. 1160, of 21st April 1864, paragraphs 9, 18, and 20. Government Resolation No. 2353, of 22ndh June 1864, paragraph 5.
Revenue Oommisaioner No. 1728, of 6th June 1864, paragraph 23.
Government Resolution No. 3291, of 29 th Augrog 1864, paragraph 11.
from or situated within the banks of rivers in the Daskroi and (late) Jetalpur districts of the Ahmedabad Collectorate should be excluded from the guarantee given for the permanency of the survey rates, pending receipt of a report on the revision of the classification and on the substitution of an improved method of assessment for that adopted in the original settlement by the survey of these lands.
2. On resuming charge of this office I found that no report on this subject has yet been submitted ; and although I have not the information necessary to enable me to give so detailed an accont of the effect of the revision as I could wish, yet I am unwilling to delay the report, which has been already too long awaited, hoping that the figures I can give will be sufficient to enable the Revenue Commissioner and Government to come to a decision on the subject.
3. The lands the original assessment of which it has been found necessary to revise are of two classes:
I.-Delkudiat, or lands situated near the bank of a river, and irrigated or capable of being irrigated from dheloudis, which are wells sunk in the bank and fed by a channel cut from the stream.
4. These lands were originally assessed at dry-crop rates only, a rate upon each bag used to lift the water being levied in addition in years when wet crops were grown.
'5. The objection to this mode of assessment was that the bag rate required careful supervision, and was even then easily evaded, and that it tended to check the extension of wet-crop cultivation.
II.-Bhátha, or alluvial lands within the banks of rivers. These are exceedingly fertile and valuable, their soil being generally composed of the finest mould, rich in organic matter, while water can always be obtained in them within a few feet of the surface, and they are generally renovated every few years by a deposit of mud. On the other hand, they are liable to be injured by more than ordinarily violent floods and covered with loose sand. According to the original settlement, those bhátha lands in which it did not seem likely, owing to their liability to be flooded, that boundary-marks of the ordinary construction would stand, were formed into large unassessed numbers ${ }_{3}$ the right of cultivation in which was to be annually sold by auction of the other bhatha lands, those which were irrigated by permanent masonry wells were assessed at the fixed bagait rates of the village; and those in which (as was most generally the case) lutcha wells were dug annually were permanently assessed at dry-crop rates only, an additional rate being levied for each water-bag worked in a kutcha well.
7. There were found to be several objections to this system of assessment. In those lands which were not assessed by the survey, individual cultivators had often, according to the former system of assessment, rights of occupancy on payment of crop rates, or rates on the area they actually cultivated, and naturally objected to their right being destroyed by the introduction of the system of annual auctions, while it was found that owing to combinations among the bidders the sums realized at the sales did not amount to anything like a fair assessment on the lands.
8. Of the assessed bhatha lands, again, it was found that even those under permanent wells were not adequately assessed by the bdadit rates imposed upon them, owing to their fertility being superior to that of ordinary garden lands to a degree which had not been sufficiently allowed for in the classification, and to their requiring little or no manure and little labour to work the shallow wells which irrigate them. And the water-bag rate for those lands which were irrigated by kutcha wells was easily evaded by the substitution of permanent masonry wells which could be built at a trifling cost, and on account of which (under Rule_ of the Joint Report) nothing in addition to the drycrop rate could be levied.
9. On account of these defects in the original settlement the late Revenue Commissioner directed us to re-classify and re-assess all these lands in the districts of Daskroi and, Jetalpur. But as the permanency of the survey rates had been guaranteed in Dholka, the revision in that district was confined to the un-assessed bhátha lands.
10. The duty of re-classification was entrusted to Mr. Harrington Bulbley, who performed it, I ought to state, with great care and skill.
11. To the dhekudiat lands the same system of classification was applied as that adopted in the Kaira District. All lands within a certain distance of a river, and irrigable from it, whether actually irrigated or not, were entered as bagait. The dry-crop anoas of classification and the dry-crop rate on these lands remained unaltered, but an additional permanent qater rate was imposed upon a scale calculated according to the difficulty of obtaining the water, the distance of the field from the river, and similar considerations. The entries in the survey register were then in the following form :-

| Arable Area | Drexudia Blaikr. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Soil. |  |  | Water. |  |  | Total Aseenamont |
|  | Clansification Annas. | Rate. | Asabsament. | Clasnifiention $\Delta$ дяая. | Rate. | Assosmmant. |  |
| 1 | 2 | 3 | 4 | 5 | 6. | 7 | 8 |
| A. g. |  | Rs. | Rs. |  | Rs. | Rs. | Res |
| 30 | - 12 | 2 | 6 | 8 | 1 | 8 | 9 |

12. The water classification, though it required great care and judgment, was very successfully done. But the question what maximum water rate should be applied to the classification, was not an easy one. For, first, the extent of actual irrigation from rivers was found to vary greatly in different villages with apparently the same facilities for $\mathrm{it}_{0}$, and for which consequently it would seem that the maximum water-rate ought to be fixed at the same amount. But if this rate were as high as might fairly be imposed in a village in which the river was extensively used for irrigation, it would be higher than a village which did not avail itself of the river could afford to pay; and, vice versa, a rate which would not press unduly upon the latter village would cause a sacrifice of revenue in the former.
13. Again, the bed of the Sábarmati is very wide, and the course of its stream varies greatly, so that it may flow one year close under one bank and the nest may be half a mile distant from it. A rate, therefore, which the people would gladly pay in years when they could get the water would be oppressive if it should so happen that they could not get it for two or three years.
14. There appeared, therefore, to be only two modes of assessing these lands (the bag rate system having been rejected) -

1st.-Either to impose on all lands classified as dhefudiát a very moderate permanent water rate to be levied under all circumstances, the lightness of the rate and the consequent large profits in years when irrigated crops are raised making up to the people for their having to pay. it when they do not or cannot use the water; or
$2 n d$.-To calculate the assessment of these lands at a really adequate water tate in addition to the dry-crop assessment, but to levy the dry-crop rate only in years in which irrigated crops are not grown.
15. I recommended the adoption of the first of these two plans, for several reasons. It avoided the necessity of annual crop inspections, and it encouraged, instead of checking, the extension of irrigated cultivation, while it will certainly produce as much revenue as the old bag rate system, and, probably, as the other mode of a fluctuating water rate. And after a demi-official correspondence

Mr. Pedder to Mr. Ellis, dated
Camp Ekalveln, Maroh 1st, 1864.
Mr. Ellis to Mr. Peddar, Camp Bulsar, March 27th, 1864.
with the late Revenue Commissioner, (which I enclose and which will also be found among the Revenue Commissioner's records), it was decided that the first plan should be adopted.
16. The maximum water rate usually fixed is Rs. 2 per acre, but as this is imposed on those lands only which are close to the bank, and in which the expense of constructing a dhekudi is small, the average rate does not exceed one rupee. This rate will produce a permanent revenue exceeding that under the bag rate system, while it is not sufficient to cause any risk of lands being thrown out of cultivation in years in which the cultivators do not or cannot:use the water.
17. In one or two cases, however, a higher rate has been imposed. Nearly all the lands of village Kalloli, for instance, can be and in rotation are irrigated either from the Sábarmati or Khári (between which two rivers they lie near their junction) or from both. Those lands which can be irrigated from either river have been assessed at a maximum water rate of Rs. 4, as their watersupply is a practically a certain one.
18. Bhátha lands were divided by Mr . Bulkley into 3 classes:-

1st.-Those lands in which no permanent right of occupancy existed, and where boundary marks were unlikely to stand, were left as unassessed numbers, to be sold annually by auction.
$2 n d$ - Those tands in which a right of occupancy was claimed, but which were liable to be swept away or injured by the floods were cut up into large numbers, defined by substantial pillars. No fixed assessment can be imposed on these lands, but they are to be allowed to cultivale in them, paying upon the area actually cultizated each year'at a fixed rate, which is the same as the average rate of the permanently assessed bhdtha lands. Those persons who have an occupancy claim to their lands will, of course, have a prior right to cultivate them.

3rd.-All other bhátha lands have been cut up into assessed numbers, defined by boundary-marks. more substantial than the ordinary ones when the lands are at all liable to be flooded. The original dry-crop classification of these lands was not altered, but guins or extra classification annas were added to it, to allow for the varying depth and quality of the water. To the classification thus ascertained a permanent bágiait rate was applied; whether the means for irrigation actually exist or not. As water is always procurable, and a permanent well costs only from Rs. 30 to Rs: 50 , and a kutcha well Rs. 4 or Rs. 5 in these lands, there is no hardship in this course. The maximum rate for the sugar-growing villages near Ahmedabad has been fixed at Rs. 14-8 per acre, and this has been diminished for the more distantand inferior villages.
19. When at Ahmedabad, last April, I had an opportunity of inspecting a good deal of the bhátha land the assessment of which has been revised, and I am convinced that the rates now imposed are not at all too high for the greatest fiortion of it, but it is said (and I think with truth) that the original scale of dry-crop classification, which, as I have said, has remained unaltered, did not make a sufficient difference between the richest of these soils and the poorer and more sandy ones, and that the latter are now somewhat over-assessed. Such soils, however, are not numerous; and though a few fields may in consequence of this error remain waste, yet I do not think it would be advisable to incur further expense and trouble in endeavouring to rectify it.
20. The accompanying* vernacular statement, of which the following table

- Not on the file. A is an abstract, shows the difference in area and assessment caused in the rakbo of each village by the revision. From this it will be seen that the total increase in culturable area caused by the assessment of bhectha lands previously entered as barren is acres 3,141-18, and of assessment Rs. 71,358-4 in 92 villages. I regret that I cannot show without reference to the village books, which would have caused a still further delay, the proportion of the increase which belongs to Government and to alienated land :-

TABLE A, showing the difference, in Area and Assessment of river lands caused by the revision of classification and assessment made in $1863-64$ ins Daskroi, Jetalpur and Dholka Parganas of the Ahmedabad Oollectorate.

21. Table $\mathbf{B}$ gives the actual increase of assessment, as shown by the jamabándi papers of 1863-64, on the cultivated Government lands affected by the revision in 40* villages of Daskroi and 37 of Jetalpur. From this it will be seen that the net increase caused by the revision in these parganas is Rs. 30,393 . To this must be added the fluctuating rate on the cultivation of the 2nd class of bhatha land (vide paragraph 18, above), the increase to the summary settlement quit-rent caused by the increase of the assessment of alienated lands, and the increase in the fixed quit-rent of alienated lands in the cases where under the original settlement they had been fixed at the full survey assessment which was less than the average of former collections.
Table B, showing the effect of the reivision on cultivated Government lands actually affected by it, according to the jamábandi of 1863-64.

| Name of Diakriot. | According 70 Tin Oghajmale aveasaubnet. |  | - Acoording to tier mayigad Absbssubitr. |  |  |  |  |  | Net Inorease cansed by the Ravision |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dhokudiat Land. |  | Bhatha Land. |  | Total. |  |  |  |
|  | Acros. | Asgessment, including Bag Rate. | Acres. | Asbessment. | Acres. | Lesesasment. | Acres. | Aspersment. | Acres. | Asgesminent. |
| 1 | $\pm$ | 8. | * | 8 | 6 | 7 | 8 | 9 | 10 | 11 |
|  |  | $\begin{array}{ccc} \text { Res } & \text { A. } & \text { p. } \\ 10,888 & 10 & 5 \\ 18,615 & 5 & 0 \end{array}$ |  | $\begin{array}{ccc} \text { Ras, } & \text { a. } & \text { p. } \\ 3,888 & 0 & 0 \\ 0,460 & 4 & 0 \end{array}$ | $\begin{array}{r} \text { A. } \\ \text { g. } \\ 1,848 \\ \hline 8,267 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 15,700 & 0 & 0 \\ 34,154 & 0 & 0 \end{array}$ | $\begin{array}{cc} \text { A. } & \mathrm{g} \\ 8,204 & 1 \\ 5,244 & 88 \end{array}$ | $5 \left\lvert\, \begin{array}{ccc} \text { Re. } & \text { an } & \text { p. } \\ 19,802 & 0 & 0 \\ 40,806 & 18 & 0 \end{array}\right.$ | A. E <br> 95 <br> 268 |  |
| Total | $\begin{array}{lll}8,085 & 29\end{array}$ | 29,604 96 | 9,388 25 | 10,138 $\uparrow 0$ | 5,110 14 | 40,86090 | 8,448 88 | 906,980 18.0 | 38810 | 80,392 10 \% |

22. The Dholka villages have not been included in the table, as lands in them previously assessed were not affected by the revision. But I am informed by the Mámlatdár that un-assessed bhitha lands to the extent of acres 1,742 were in 1863-64 sold by auction for cultivation for Rs. 2,056-4-0, and that of them 972-14 acres were by the revision cut up into survey numbers assessed at Rs. 9,520-8-0.
23. The net increase of revenue caused by the revision is, therefore, over Rs. $40,000,-\mathrm{a}$ result which may, I hope, be considered satisfactory. But I fear that these river lands in Ahmedabad will always be troublesome to administer. The Sábarmati is subject to such violent floods that not a monsoon passes in which some assessed fields are not wholly or partially swept away, and I would suggest that the Taláti in all villages on the banks of the river should always be a man able to measure well with chain and cross-staff and to celculate his measurements in acres.

I have, \&c.,
W. G. PEDDER.

No. 351 of 1865.
From

## Captan C. J. PRESCOTT, <br> Superintendent of Revenue Survey, Gujarát ;

To

J. E, OLIPHANT, Esquire, Collector of A hmedabad.

Surat, 16th October 1865.

$$
\mathrm{Sir}_{\mathrm{If}}
$$

Mr. Pedder's Report of 2nd October 1865 and demi-official letters to Mr. Ehis.

Vernacular revenue statement

I have the honour to request the favour of your
Ihawe the honour to request the favour of your submitting to the Revenue Commissioner, N. D., the enclosed report and accompaniments noted in the margin, relative to the revised assessments of bhithe lands in the Daskroi, Dholka, and Jetalpur Tálukás of your collectorate.

[^6]2. This report should have been 'prepared long ago ; but since Mr. Pedder has been employed on the Vatan Commission my work has been considerably increased, and last seasorr while Mr. Trevor was engaged in the Kaira Collectorate in settling the malehi villages in Thásra and several narva villages in Mátar and Mehmadabad, I myself was employed in Surat in the settlement of two large tálukás. The report now forwarded was, therefore, left over, but was immediately taken up on Mr. Pedder's return to this Department, and it will, I trust, be considered satisfactory.

I have, \&c.,
C. J. PRESCOTT.

No. 44 or 1861 .
From

W. G. PEDDER, Esquire, Assistant Settlement Officer in Gujarat;

To

## Captan PRESCOTT,

Superintendent, Revenue Survey, Gujarát.
Camp Ahmedabad, 10th May 1861.
Sir,
During the recent visit of the Revenue Commissioner, N. D., that gentleman directed me to submit through you a report on the village of Kubadthal, in the Daskroi Pargana, with reference to the extent to which it may be practicable to introduce the survey system into that village, which, you are aware, is held upon the "narva" tenure, and the Patels of which will not consent to its being made "senja".
2. As the narva tenure is complicated and its original nature somewhat obscure it will be well to give a brief sketch of the revenue bistory and customs of this village, derived from the "kalambandi" prepared by the district and village hereditary officers in Samvat 1883, A. D. 1826-27, or nine years after the introduction of British rule.
3. The account begins with the year Samvat 1801, A. D. 1744-45, from which year until Samvat 1825 the village was managed by a fluctuating "udhad jamábandi "which the Marátha Kamávisdár annually imposed by calling up the Matadár Patels, then 4 or 5 in number, and compelling them to sign an agreement to be responsible for the amount. The entire internal management was in the hands of these Patels, who levied the jama from the cultivators according to the old bighoti rates, which apparently had originated with the survey of Raja Todar Mal, and which were as follows :-aval $\frac{\text { kavotare }}{\text { woil }}$ Rstired 5 or 6 ; aval manured $\frac{\text { porfun }}{\text { whitid }}$ Rs. 4 ; duyam Rs. $1 \frac{1}{2}$; soem 8 as. If, at these rates, the revenue of the village amounted to more than the jamábandi, the Patels gained; if to less, they had to make up the difference.
4. In Samvat 1801 the jamábandi was Rs. 700. This was gradually increased to Rs. 1,400 , and, as the village suffered severely from "toda girás" exactions, the Patels lost annually, and to raise money to pay the jamábandi were obliged to sell or mortgage a number of fields. In Sanvat 1825 the rains were scanty, and the Kamávisdár demanding an increased jamábandi the Patels deserted the village, but were induced by promises to return. Next year the Kamávisdár demanded the jamábandi of both years at once, and to meet this the Patels were compelled to impose a kutcha bighoti heavier than the old village rates. In Samvat 1828 the Patels resolved to found a narva, and petitioned that a "panch" of the Patels of other villages might be sent to arrange the terms, which yas done as follows.
5. All the lands of the village cultivated by pátidárs, which amounted to 784 bighas, were divided into 4 "mukh bhags" or principal shares, each represented by 11 annas and containing 56 bighas of irrigated and 140 bighas of dry. crop land. All lands held by Kolis, Kanbis, \&c:, were exeluded from the narva,
and called majmun. The village was managed entirely by the mátadars, 'who were the mukh narvádárs, as follows:-The Kamávisdar having fixed the jamábandi of the village the natádárs collected the produce of majmun lands (at whatever bighoti rates they chose to fix), the veros or cash cesses, the produce of fruit-trees and the salami on alienated lands (all of which was called "majmuni upaj"), and devoted this first to paying the jamábandi, making up the difference by a phalvani or division among themselves and their sub-sharers of so many rupees to each anna of the narva.
6. The first year of the narva this phálvani amounted to Rs. 20 per anna, $=$ Rs. 880 , and the majmun revenue was about Rs. 300. But the demands of the Marátha Government continually increasing, the Patels were obliged to sell and mortgage majnun land till in Samvat 1885 one mukh narvadár broke, that is, could not pay his share of the phalrani, and ran away from the village. This caused the break-up of the narva, and the village reverted to its old management. The Patels then imposed on all lands not alienated a bighoti at the following rates :-Irrigated lands, Rs. 6 per bigha; dry-crop, Rs. 2, Rs. 1-8, Re. 1, and Re. 0-8 per bhiga. The Kamávisdár fixed annually the amount of the jamábandi, from which was deducted the gámkharach, including todá girás.
7. Things continued on this footing until Samvat 1871, but as the Kamavisdár continually raised the jamábandi, the Patels lost annually, and were obliged to sell and mortgage land. In Sanvvat 1840, a year of scarcity, the Patels were compelled to get a manotidár to advance Rs. 400, and being unable to repay him deserted the village. The next year, however, they were induced to return.
8. In Samvat 1'852, A.D. 1795-96, the Patels applied for a panch to reinstate the narva, which was done, and the village was placed on its present footing.
9. The talpad lands were divided into three classes-those in the possession of pátidárs, those in the permanent occupation of Kanbis, and those held by other classes alienated talpad lands, \&c. The two former were called narvádári; the third majmun. A narva of 39 annas was framed; divided as follows, there being this time 6 matádárs. Two mukh narvádárs were appointed to each of three mukh bhágs of 12 annas each. The lands contained in each mukh bhág amounted respectively to 239,263 and 259 bighas, the reason of the triffing difference being that the lands in one division were considered somewhat more valuable than those in another. There was a fourth bhág of 3 annas consisting of 56 bighás of majmun land divided equally among four Patels. It seems that these persons were not originally patidárs of the vlllage, and were, therefore, not included among the sub-sharers of the other bhags, although possessing sufficient influence to be admitted to the privileges of the narva.
10. The Kanbis, who occupied lands permanently, were distributed under the three principal bhágs, the quantity of each man's land being fixed and bis payments being levied udhad or in the lump. But the narvadars might raise the amount of the udhad kháta at their discretion. The majmun lands were let by the narvidirs as they pleased. The village site was divided, a certain portion being set aside for the vanta, for the tenants of the majmun lands and for the village servants, among the principal bhága.
11. The Kamávisdar having fixed the jama of the village, the narvádárs levied the bighoti of the majmun lands, the udhad khatás of the Kanbis, the produce of fruit-trees and of verás and the quit-rents on alienated lands, and the difference between the total amount' thus raised and the udhad jama they raised among themselves by a phálvani of so many rupees of each anna of the narva. Thus, in the first year of the narva, the jamabandi was Rs. 2,546, besides the gám kharach, which the narvadars to provide for divided as follows :-

| Rent of majmon lands and udhad khátás of Kanbis |  | ...Rs. 1,009 |  |
| :---: | :---: | :---: | :---: |
| Verds, produce of fruit-trees, \&c. ... | ... |  | 200 |
| Salami of aliezated lands ... ... | $\ldots$ |  | 167 |
| Phálvaniof narvadars at Rs. 30 per anna | ... |  | 1,170 |
|  |  |  | 2,546 |

12. Two or three years after this the village was burnt and the cattle carried off by the Degam Kolis, and the Patels were obliged to agree to pay giras for the future. The Kamávisdár annually increased the jamábandi, and the Patels were consequently annually obliged to sell land to provide for the payments. In Samvat 1869, the year of the great famine, the Kamávisdar imprisoned the naryadars till they signed a blank agreement, which he afterwards filled up, for Rs. 5,247 , besides the gám kharuch, and to raise this amount, although the Patels fixed a phálvani of Rs. 86 per anna and sold a quantity of majmun land, they were obliged to borrow Rs, 700 from a sávkár.
13. In Samvat 1874, A.D. 1817, the district passed under British rule, and in that year Captain Robertson sold by auction the farm of the village on an istava lease of four years-the first year at Rs. 3,551 and the last Rs. 3,815. The Patels bought this lease from the izardár for Rs. 600, but lost Rs. 1,000 by the bargain. The village was then farmed, sometimes to the Patels and sometimes to a speculator, till Samvat 1882, when, as the village was getting deserted, the narvadárs refused to undertake for Rs. 3,800 , and the village was consequently made "kutcha" ; that is, taken under direct management, and a Talati sent there, who collected the majmun upaj and fixed the phálvani of the narradárs, which was in Samvat 1883 Rs. 55 per anna, and the village has remained on this footing till the present time.
14. The kalambandi then proceeds to state the village custom, the rights of the narvadárs, \&e., which were as follows:-
15. The narvádárs have a proprietary right, transmissible according ta the laws of inheritance in all the narva lands included in the phálvani as long as the assessment according to the pholvani is paid. Under the Maratha rule they had the right of managing the majmun land as they pleased, and of solling or mortgaging it to provide for the jamábandi; but this has been stopped, and the Collector fixes the rates of the majmun lands and levies direct from the cultivators. But for the sake of their alru the narvadárs have still the right of letting waste majmun lands to whomsoever they please (that is, apparently the form of applying to the narvadars for permission to take up waste majmun. land was kept up. If any petá narvádár cannot pay his share of the phálvani, the mukh narvádär, whose sub-sharer he is, must take his land and pay the rupees. If he cannot do so, the body of narvadárs must let the land to somebody for what they can get, and if this is less than the defaulter's phailvani must make up the difference among themselves in proportion to their own phálvani. If they do not do so, the land becomes majmun, all wells and all other improvements on it becoming the property of Government, and the annas of the defaulter's share are to be deducted from the entire narva. In this case if the defaulting narvadár or his. descendant returns to the village he cannot be re-admitted to the privileges of a narvádár. But if the land has been taken up by another narvádár and has not been made majmun, the defaulter or his descendant may recover his position and land after any period, if he can get the narvádár in possession to agree to the compensation for improvements awarded by a panch. One peta narvidair may mortgage his land to another, and as long as the rupees of the phálvani are paid, the mortgagee cannot be disturbed, but if they are not paid, the land is to be treated as above.
16. All the khátábandi lands of Kanbis is included in one or.other of the mulch bhágs; it is, however, distinct from the narvádári land held by the narvádars themselves. and the rupees of the Kanbis udhad khatás do not enter into the phälvani of the narvádârs. Under the Marátha rule, if the Kanbi improved his land, the mukh narvádár could not oust him, but the narvádár had the right of making any improvement he liked and of taking the profits, and the narvadárs could raise or lower the amount of the udhad kháta at their pleasure. Now, however, (that is, when the kalambandi was written) this has been stopped, the Collector fixes the amount of each Kanbi's kháta, and the mukh narvaddar may not interfere. The latter is, however, responsible for the Kanbi's payments, and, if he has to pay, may take the land, manage it as he pleases, and pay the same udhad for it as the Kanbi, distinet from his own phálvani. If he will not • do this, the land becomes majmun, and the body of narvádárs are not called on to make good the loss, as in the narvádári lands within the phalvani.
17. All the village servants are distributed among the various mukh bhágs, perform service, and receive their grain fees according to the bhags, and may not transfer themselves from one bhág to another. The verás on various trades, \&c.; used to be fixed and levied by the narvádárs, but now (at the date of the kalambandi) by the Collector. The narvádárs have various privileges : e.g. if a narvádár has a funeral or wedding in his house he may purchase what ghee he requires from the Banya of his own bhág at a certain deduction from the market price.
18. The constitution of the village is now very nearly as above described. A few changes have, however, taken place; only 8 names are now entered as mukh narvadars-2 on bhags of ${ }^{-12}$ annas, 2 on bhágs of 6 annas, and 4 jointly on a bhág of 3 annas. Each anna is divided into 16 wassás, so that the whole narva contains 624 wassís $=39$ annas, and the phälvani of the principal and sub-sharers is made strictly in proportion to the annas or wassis of each share. Each peta narvaddar has a separate kháta, but the Kanbis not narvádárs, who hold narvádári lands and pay udhad or in the lump, have no separate khátás; they are entered as subordinate to the kháta of the principal narvádar.
19. Oút of the narvádári lands held by themselves the narvádárs have set aside a certain portion from each principal bhag under the name of "bhág majmun". (as distinguished from gám majmun or senja land of the village). This land is let on behalf of the body of narvadárs comprised in each princlpal bhág, and its proceeds applied to defraying the village expenses, not to providing for the village jamábandi. This is entirely a private arrangement, and no deduction from the jamabandi of the village is supposed to be made on account of these lands.
20. The details of all the narvadari lands are given in the accompanying Gujaráti statement, of which the following is an abstract :-

| Kukin Bhagr. | $\begin{gathered} \text { Murh } \\ \text { Bhafe } \\ \hline \end{gathered}$ $\begin{aligned} & \mathrm{ln} \\ & \text { Annag. } \end{aligned}$ |  | Peta Narv. Sub. aharote. | Kanble holding udhar khato muthore dinate to the Mukh Nark dars |  | Rupees of the "rhalyani." | Rupees of the kanbtri Khatic |  | Average Rate per Aore of present payments both of Narvadary and Kanbis. | $\begin{aligned} & \text { phag } \\ & \text { Majmun } \\ & \text { Land } \\ & \text { exaluded } \\ & \text { from the } \\ & \text { Phalvani } \\ & \text { in Acrou. } \end{aligned}$ | $\begin{aligned} & \text { Surver } \\ & \text { Actevesment } \\ & \text { Rupees. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1 . \cdots$ | 12 $\cdots \cdots$ $\cdots \cdots$ | 1 $\cdots .$. $\cdots$ $\cdots$ | c ${ }^{77}$ | $\cdots$ $\cdots$ $\cdots$ |  | $\begin{array}{rcc} \text { Rs. } & \text { a } & \text { p. } \\ 25 & 12 & 0 \\ 476 & 15 & 0 \\ \ldots \ldots \ldots & \\ \ldots \ldots & \end{array}$ | $\begin{array}{\|cc} \text { Ra. } & \mathrm{a} \\ \ldots \\ \dddot{7} \\ 26 \dddot{7} & 0 \\ \ldots \end{array}$ | $\begin{gathered} \text { A. } g \\ 924 \\ 15626 \\ 634 \\ \ldots \end{gathered}$ | $\left\lvert\, \begin{array}{rrr} \text { Rs } & \text { a } & \text { p } \\ 2 & 3 & 0 \\ 2 & 5 & 3 \\ 3 & 10 & 1 \\ & \ldots & \end{array}\right.$ | A. g. <br> ... <br> 1735 | $\begin{array}{rr} \text { Rs. } & \text { a. } \\ 19 & 12 \\ 414 & 4 \\ 222 & 8 \\ 51 & 12 \end{array}$ |
|  | $\cdots$ | 1 | 17 | 6 | 1920 | 502110 | 2670 | 229'14 | ** | 1735 | 7084 |
| $2 . .$. | 12 <br> $\cdots \cdots$ <br> $\cdots \cdots$ <br> .. | 1 $\cdots$ $\cdots$ $\cdots$ | $\because 23$ $\cdots$ $\cdots$ | $\cdots$ | $\begin{array}{cc}6 & 0 \\ 186 & 0 \\ \cdots & \\ \cdots & \end{array}$ | $\begin{array}{rrr} 15 & 11 & 0 \\ 487 & 0 & 0 \\ \cdots \cdots & \end{array}$ | $\because$ $\cdots$ 271 $\cdots$ | $\begin{array}{cc}9 & 11 \\ 167 & 1 \\ 48 & 36 \\ \cdots\end{array}$ | $\begin{array}{lll} 1 & 4 & 4 \\ 2 & 1 & 11 \\ 4 & 3 & 7 \end{array}$ | $\cdots$ $\cdots$ $\cdots$ 21 | $\begin{array}{rr} 22 & 8 \\ 434 & 8 \\ 144 & 8 \\ -42 & 0 \end{array}$ |
|  | $\cdots$ | 1 | 23. | 7 | 1820 | 502110 | 2719 | 2258 | -* | 219 | 6438 |
| 3. | 6 $\cdots$ $\cdots$ | 1 <br> $\cdots \cdots$ <br> $\cdots$ <br> .. | 79 $\cdots .$. $\cdots$ | $\cdots{ }^{\cdots \cdots} \times$ |  | 20 15 0 <br> 230 5 0 <br> $\cdots \ldots \ldots$.   <br> $\cdots$   | $\cdots$ $\cdots 3$ $\cdots$ | 711 7781 2388 $\cdots$ | $\begin{array}{ccc} 2 & 6 & 3 \\ 2 & 5 & 1 \\ 3 & 3 & 10 \\ & \ldots \end{array}$ |  | $\begin{array}{rr} 23 & 8 \\ 200 & 8 \\ 66 & 4 \\ 29 & 12 \end{array}$ |
|  | $\cdots$ | 1 | 9 | 3 | 960 | 25140 | 1149 | 1080 | $\cdots$ | 1113 | 3200 |
| $4 \quad .$. | ... 6 $\cdots$ $\cdots$ | 1 <br> $\cdots \cdots$ <br> $\cdots .$. | $\cdots 7$ $\cdots$ $\cdots$ |  | 2810 724 $\cdots$ $\cdots$ | $\begin{array}{ccc}61 & 1 & 2 \\ 190 & 4 & 11 \\ \cdots \cdots . .\end{array}$ | $\cdots$ 108. $\cdots$ | $\begin{array}{ll} 28 & 11 \\ 68 & 10 \\ 24 & 8 \end{array}$ | $\begin{array}{rrr} 1 & 15 & 8 \\ 2 & 3 & 1 \\ 3 & 4 & 8 \end{array}$ | $\begin{gathered} \ddot{ } \\ \ddot{13} 23 \end{gathered}$ | $\begin{array}{r} 6812 \\ 1738 \\ 7612 \\ 328 \end{array}$ |
|  | $\cdots$ | 1 | 7 | 4 | 960 | 25160 | 1080 | $11538$ | $\cdots$ | 1323 | 3514 |
| 6 ... | 3 | 4 | $\because$ | ** | 480 | 125120 | $\cdots$ | 3839 | 2311 | ... | 11312 |
| Graad Total. | 89 | 8 | 56 | 20 | 6240 | 1,633 $12 \quad 0$ | 7612 | 71719 | ..* | 640 | 2,136 12 |

21. It will be seen from the above statement that the chief pecuniary advantage which the narvadars derive from this tenure is that they pay for the lands which they hold at lower rates than do the "udhad" Kanbis, and consequently although the effect of the introduction of the survey system would be to reduce the assessment of narvádári lands by Rs. 262, yet the payments of the narvadárs would be reduced in all cases in a much smaller proportion than those of the Kanbis, and in many cases, e. $g$. that of the 2nd mukh narvadár in the statement, the amount of narvádárs' khátás would be raised. This would be unjust, for it must be noted that under the narvádári system a narvádár enjoyed nearly the whole of the benefits of any improvement that he might make in his lands. If, for instance, a narvadár, holding a kháta of 10 acres and paying Rs. 20 "phálvani", by constructing a well so improved his land that it became capable of paying Rs. 6 per acre instead of Rs. 2, the only way in which the Marátha Government could levy this extra Rs. 40 was by adding that sum to the jamábandi of the village, and the narvadar would only have to pay the proportionate increase to his phalvani. Thus the power of the Government to levy, assessment was checked, not by the ability to pay of those narvadairs who had improved their lands, but by that of those who had not. This explains the great popularity of the narva tenure which alone under the Maraitha rule offered some security that a rayat should reap the fruits of his own industry. But if the survey system be now introduced, all lands, improved or not, will be rated at their present value, and those narvádárs who have ithproved their land under the present tenure will have good grounds for complaint.
22. It is, I believe, your intention to report as soon as possible upon ${ }^{\circ}$ the narva and bhágdári tenures of Gujarát and to obtain the instructions of Government as to the settlement to be made of villages held on these systems. I need not, therefore, here explain my reasons for thinking that it, would be impolitic as well as unjust to destroy the narva tenure where it exists. I have shown above that the survey system is incompatible with the maintenance of the narva tenure, and it appears to be clear that under Section VIII of Regulation XVII we cannot disturb the internal management of a narva village, though we may raise or lower the entire jamábandi.
23. We must, therefore, attempt to make some settlement based on the survey valuation of the village which shall define and secure the rights both of the narvádárs and of the subordinate holders, and the latter have, I think, a claim to a proportionate reduction of their assessment.
24. On these principles I shall, if you approve, prepare the jamábandi papers in the following manner. The survey assessment of all narvadári lands, cultivated and waste, is, as stated above, Rs. 2,136-12-0, or as nearly as possible 12-1-3 per cent. less than the present assessment, Rs. 2,394-14-0. The kháta of each udhad Kanbi will then be reduced 12-1-3 per cent. and fixed at the amount for the future, the entire assessment of udhad Kanbis being thus reduced from Rs. 761-2-0 to Rs. 670. The difference (1,466-12) between the latter sum and the survey kamál of Rs. 2,136-12.0 is what must be paid by the narvádárs.
25. To provide for this I propose to fix a new phálvani of Rs. 37 per anna of the narva (instead of Rs. 42, the present amount), which will produce Rs. 1,443-0-0. The entire produce of narvadári lands will then be Rs. 23-12 less than the survey kamál, but it is desirable to get a phálvanï in round numbers; and as the kamál is calculated on the entire area, waste as well as cultivated, a deduction of Rs. 23-12-0 may be fairly allowed in consideration of the numbers which in senja villages are always set apart free of assessment for the village rickyard and for other purposes.
26. This settlement will be highly advantageous to Government, as the entire kamál will be always realized without any deduction on account of those numbers which may remain waste. The people are also well satisfied with this arrangement, although they at first raised two objections to it. The udhad Kanbis urged that they ought to be considered sarkári cultivatiors and not tenants of the narvadárs, that they ought to pay only at survey rates for their lands, that they ought to have separate khatávahi and receipt-books, not subordinate to the khata of the mukh narvadar, and, in short, that their lands
ought to be declared majmun. To this I consider that neither under the Regulation nor according to the village constitution have they the smallest claim, and in fact they admit that they ask as a favour and not as of right. I think, however, that they might be allowed to have separate receipt-books, being copies of the portion of the narvadar's kháta which relates to them.
27. On the other hand the narvádárs urged that as they are held responsible for the Kanbis' payments, and since the lands of Kanbis revert in the first instance to them and not to Government, they ought to be permitted to fix whatever rates they choose on the lands in the occupation of Kanbis, or at least that the khátás of the Kanbis should be kept at their present amount and the reduction made entirely in the amount of the phalvani. This objection is far more reasonable than that of the Kanbis, as there can be no doubt that, previous to British rule, the Kanbis were little more than tenants-at-will of the narvadárs. For the last thirty-three years, however, the Collector has fixed the amount of the udhad khátás, and the narvádárs have not been permitted to interfere (see paragraph 16). The Kanbis would thus appear to have acquired customary right to fixed payments, and if the khátás were not reduced in proportion to the reduction in the entire jamábandi many of them would probably abandon the village. Both these objections have been withdrawn, and the people are perfectly satisfied with the proposed arrangement.
28. There seems to have been an old standing dispute regarding the right of narvádárs to levy ground-rent from the sites of Kanbis' houses. No mention is made of this right in the kalambandi; and as no ground-rent seems to have been actually levied for some years, I have informed the narvádárs that they will not be permitted to levy it for the future.
29. I have informed the people that they will be required to keep up the survey boundary-marks as in senja villages, and they promise to do this.
30. If these arrangements are sanctioned, a statement ought to be prepared and kept in the village records showing the names of all persons, narvadars and udhod Kanbis, with whom the settlement was made, the annas and wassas of the share of each narvadar, the amount of each person's lthdta, and the survey numbers which comprise the lands in his occupation. By means of this yddi all disputes connected with the future administration of the village can be easily settled.

I have, \&c.,<br>W. G. PEDDER, Assistant Settlement Officer, Gujarát.

$$
\text { No. - or } 1862 .
$$

## Settlement.

Forwarded in original to the Revenue Commissioner, N. D., through the Collector of Ahmedabad (as an appendix to the jamábandi report of Daskroi), with a recommendation that the settlement herein proposed by Mr. Pedder should be confirmed, as it will be highly satisfactory to the narvádárs (whose rights under Section VIII of Regulation XVII of 1827 will be preserved intact), and very advantageous to Government, as the entire survey kamal, both on cuitivated and waste land, will invariably be realized.

## C. J. PRESCOTT,

Saperintendent, Revenue Survey, Gujarát.

```
    Camp Surat Districts,
    17th J.Jauary 1862.}
B 363-34
```

No. 848 or 1862.

## From

G. NORMAN, Esquire,

Acting First Assistant Collector in charge Ahmedabad;
To

B. H. ELLIS, Esquira,

Revenue Commissioner, N. D.
Sir,
With reference to your letter No. 2358, dated 23rd September, I have the honour to return Mr. Pedder's report regarding the settlement of village Kubadthal.
2. I concur with Mr. Pedder that it would be unjust to destroy the narve tenure, and at the same time I consider that, as far as practicable, the survey system ought to be introduced into the village.
3. The settlement introduced by Mr. Pedder appears to work well. There are no complaints from the inhabitants, and at the same time no loss of revenue has been sustained. I would, therefore, recommend that it be confirmed.
4. With regard to paragraph 26 of the report, I see no objection to the $u d h a d$ Kanbis being allowed to have separate receipt-books in the manner therein suggested.

I have, \&c.,
G. NORMAN, Acting First Assistant Collector in charge. Ahmedabad, Collector's Camp Gogha, 26 th November 1862.

No. 521 or 1863.
To The Honourable A. D. Robertson,
Secretary to Government, Bombay.
Sir, $\quad \cdots .$.

I have the honour to submit herewith two reports by Mr. Pedder, Survey

No. 11, 21st March 1862, with Captain Prebcott's No. 99, dated 25th idem.
No. 44, withont date, with Captain Prescott's dated 17th January 1862, and First Assistant Collector, Ahmedabad, in charge, No. 848, dated 26th November. 1862.
and Settlement Officer in Gujarat, fully and ably describing the history and present condition of villages held on the tenure called narva or bhagdári, and proposing to adopt in such villages generally the mode of settlement introduced experimentally at Mr. Pedder's suggestion and with the sanction of Mr. Mansfield into the village Kubadthal in the Daskroi Táluka of Ahmedabad.
2. The Collector reports that the settlement of this village is working satisfactorily, and I have directed that the same
Vide report No. 848, dated 26th November, appended. principle be adopted in 4 villages which will come under settlement this year in the Mátar Pargana. In Kubadthal the result financially is stated to be advantageous to Government. I should explain that the actual realizations are lower, owing to the former rates having been higher than they. ought to be according to the valuation of the survey. There will thus be a decrease of

12 per cent. in the actual collections as compared with former years; but narva villages have usually been much over-assessed in comparison with villages held on ordinary rayatvar tenure; this result, therefore, is not surprising, and the revenue would have fallen off more but for the principle adopted in the settlement whereby the narvadars are answerable for all the culturable waste as well as for the lands actually cultivated. It is in this sense that Captain Prescott and Mr. Norman state that the settlement has been advantageous to Government.
(Paragraphs 3, 4, 5, 6, 7 and 8 omitted.)
9. Mr. Pedder's proposals regarding non-proprietary cultivators, whom he classes as tenants-at-will and customary tenants are, in my opinion, judicious, and the success of the settlement of Kubadthal may be taken as a test of its being acceptable to those who are affected by it.
(Paragraphs 10, 11 and 12 omitted.)
13. These are the only points which appear to require notice ; and I beg, in conclusion, to recommend Mr. Pedder's proposed mode of settlement for the approval of His Excellency the Governor in Council.

I have, \&c.,<br>B. H. ELLIS, Revenue Commissioner, N.D.

$\left.\begin{array}{c}\text { Camp Nadiád, } \\ \text { 26th February 186s. }\end{array}\right\}$
Revenue Surbey and Assessment.
No. 2481.

## Revenoe Department. <br> Bombay Castle, soth June 1864:

The Governor in Council entirely concurs with the Revenue Commissioner in considering that Mr. Pedder deserves great credit for the very clear and comprehensive history he has given of the narvadári and bhágdári tenures, and for the laborious care and ability with which he has treated this important and difficult subject.
2. His Excellency in Council also entirely concurs in the opinions expressed in these papers as to the expediency of maintaining intact the narvadári and bhágdári tenures, where they are found to exist, so far as their preservation depends on Government.
3. In his report on the experimental settlement of the village of Kubadthal Mr. Pedder has fully described how, without disturbing the internal management of these villages, he would in the case of poor pátidári villages introduce a settlement based on the survey valuation of the village.
4. The principle he has adopted is to ascertain the survey value of all the narvádári lands, and to impose this valuation by a new distribution proportionate to the several shares or narvas in the village. In the event, however, of the survey kamál being less than the old lump assessment, a percentage deduction according to the difference between those two amounts is in the first instance made from the sums paid by the cultivators (not narvadars) who have permanent rights of occupancy under the narvadars. Deducting the entire amount (thus reduced) paid by these cultivators from the survey kamal, the remainder is entered in a lump sum in the names of the several narvádárs, according to their shares in the narva, without attempting to show in the kháta of each sharer the survey assessment on each of his fields.
5. The eettlement introduced experimentally in Kubadthal in 1861-62 is reported to give satisfaction to the people, while the result is all that Government could desire financially; for, although the realizations are lower than they were, owing to the former rates having been higher than they ought to be according to the survey valuation, the narvádár is answerable, in accordance with the principles of his tenure, for the culturable waste as well as for the lands
actually cultivated, and Government, therefore, receive the full kamal assessment, which would not be the case were the settlement an ordinary rayatvári one.
(Paragraphs 6, 7 and 8 omitted.)
9. The rights of customary tenants should, as proposed, be carefully recorded and strictly upheld. In cases where the narvádárs' own rental is reduced by the survey settlement, a reduction in their payments according to the plan followed in the settlement of the village of Kubadthal may fairly be made, but in other cases it will not be expedient to reduce the amount of their payments.
(Paragraphs 10, 11, 12, 13, 14 and 15 omitted.)
16. With this modification the proposed settlements are sanctioned.

> H. E. JACOMB, Officiating Under Secretary to Government.

To
The Revenoz Commissioner, N.D.
Revenue Survey and Assessment (Daskroi Táluka). No. 3291.

## Revende Dipartment.

## Bombay Castle, 29th August 1864.

Letter from the Revenue Commissioner, N. D., No. 1728, dated 6th June 1864-Submitting, with his own observations and opinion, a report from the Saperintendent, Revence Survey and Assessment, Gajarat, relative to the introduction of ervey rates into the Daskroi Pargana of the Ahmedabad Collectorate.
Resolution.-The observations made in paragraph 1 of the review of the Jetalpur settlement are equally applicable to that of Ahmedabad Daskroi, and the Governor in Council has much pleasure in recording his appreciation of the labour and attention which Captain Prescott has bestowed in collecting the interesting and valuable information embodied in his report.
2. The modified rates were approved by Mr. Mansfield, the late Revenue Commissioner, and are considered by Mr. Ellis to be sufficiently correct to warrant their confirmation; the Governor in Council is therefore pleased to guarantee their continuance, as recommended, till the close of 1886-87.
3. Such guarantee, however, is not to be held to apply to land outaide the city of Ahmedabad, for whiok separate orders have been conveyed under Government Resolution No. 2419, dated 27th June 1864, nor to bhátha lands, regarding which a separate report is promised, nor will it be applicable to the lands within the city walls of Ahmedabad, for which separate treatment is prescribed in Government Resolution No. 3044, dated 9th September 1863, nor to the village of Batva, the detailed particulars of the settlement of which have been separately submitted to Government.
4. The report promised in Mr. Ellis'18th paragraph will be awaited.

> H. E. JACOMB,
> Offg. Under Secretary to Government.

To
Tar Revenue Comumbioner, N. D,
No. 2795 of 1864.
Poona, 3 rd Sopternber 1864.
Forwarded to the Collector of Ahmedabad for information and guidance, and for communication to the Superintendent of Gujarát Survey, for whom spare copies are appended.
2. Adverting to paragraph 3 of the Resolution, the Collector is referred to this office No. 2555 dated 11 th ultimo.

B. H. ELLIS,<br>Revenue Commissioner,

No. 1079 or 1864.

Ahmedabad Collector's Office, 11th October 1864.

Forwarded for the information of the Superintendent, Revenue Survey and Assessment.

J. E. OLIPHANT, Collector.

$$
\text { .. No. } 40 .
$$

Bombay Castle, 4th January 1866:
Commissioner, N. D., No. 4347, dated 8th December 1865-Submitting, with his observations, a letter from the Superintendent, Gujarat Revenue Survey, with endorsement thereon by the Colleotor of Ahmedabad and its accempanying report from Mr. W. G. Pedder, late Survey Settlement Officer, on the revision of the assessment of lands in the beds and on the banks of rivers in the Daskroi, Jetalpur and Dhoika Parganas.
Resolotion.-In this report Mr. Pedder gives the result of his endeavours to impose a revised assessment on certain lands.in the Daskroi, Jetalpur, and Dholka Parganas of the 'Ahmedabad Collectorate situated within and adjacent to the banks of rivers.
2. Hitherto the bhatha or alluvial lands within the banks have been assessed as follows :-The ground which was of such a shifting character as not to admit of ordinary boundary marks being put up, was divided into large biocks and sold annually by auction; that in which masonry wells could be sunk was assessed at fixed bagaít rates; and that in which only kutcha or temporary wells could be dug was assessed at dry-crop rates, and subjected to an additional tax for each water-bag used. In the case of the dhekudia, or lands situated above the bed and near the banks of the rivers, a dry-crop assessment was imposed, together with a tax on each water-bag.
3. The system of annual sales by auction must, it is evident, in many cases have interfered unjustly with occupancy rights, and must have given rise, besides, to collusion and combination on the part of the rayats; while that by which each water-bag was separately counted and taxed must have necessitated an objectionable amount of constant and minute inspection at the hands of Government officials.
4. Mr. Pedder has, in the opinion of His Excellency the Governor in Council, reduced these evila to a minimum. The system of annual sales is only to be had recourse to where no occupancy rights are claimed and where the land is of a changing and shifting character. Similar land where occupancy rights exist, is to be divided into large numbers, and a fixed rate of assessment charged on the cultivated portions. All other bhátha land is to be divided into regular survey numbers, and a moderate bágáit rate imposed in lieu of the bag tax. A low bagait rate is in like manner to be substituted in the case of the dheku. dia lands.
5. The result of Mr. Pedder's revision will be that 3,141 acres previously unassessed will be added to the arable area; 12,220 acres, hitherto assessed at dry-crop rates and subjected to the "water-bag" tax, will be permanently brought under the head of garden land; and a total increase to the amount of Rs. 71,358 will be made to the revenue. The precise portion of this sum that will be derived respectively from Government and alienated land is not given, but will be ascertainable at next year's jamábandi. Mr. Pedder, however, shows that the net increase to the Government revenue will be over Rs, 40,000.
6. His Excellency the Governor in Council has much pleasure in according his approval and sanction to the proposed arrangements, and considers that great credit is due to Mr. Pedder und Mr. H. Bulkley for the successful manner in whioh they have devised this new mode of assessment.

1

H. E. JACOMB, Under Secretary to Government.

# J. W. HADOW, Esquibr, <br> Collector of Ahmedabad. 

Surat, 10th September 1869.

## Sir,

I have the honour to forward, for the information of higher authority, proposals for the revision of assessment, according to the principles of the Bombay revenue survey, of the district of Jetalpur in yout collectorate. The revision is being carried out, as you are aware, in anticipation of the sanction of Government. My report would have been submitted at an earlier date, had not the lateness of the eeason, at which I received from the Survey Department the statements relating to garden lands, prevented my forming a reliable estimate of the pitch of assessment most suited to this species of land, and the consequent preparation of the necessary papera until the end of the fair season.
2. The revenue history of the present Jetalpur Taluka cannot well be 'separated from that of Daskroi and the other districts, by the amalgamation of portions of whicle it has been constituted a separate Mámlatdar's charge, and will, therefore, be more apprppriately referred to in the reports that may be made on those districts.
3. The taluka consist of 57 khalsa villages, of 2 inami"villages, one dharmáda (or given in charity), and 2 devasthán (or given in support of religions institutions), on which last, Government have a right to a certain revenue fn the lump. Of these 62 villages, 43 originally belonging to Daskroi and 5 to Dholka were formed into the detalpur Pargana in $\frac{\text { sampat } 18900}{1.0 .1889 .00}$ by the order of Government conveyed ir Mr. Secretary Reid's letter No. 873 of 1840, and 14 villages from the Mátar Pargana were inoorporated with them, according to Government Resolution No. 5727 dated 28th September 1852, with a tiew to bringing all the villages deriving water from the Khari River near the sluices under the management of the same revenue authorities.
4. The Jetalpur Pargana, as it at present stands, is bouhded on the north: by that of Daskroi or Daskroi Ahmedabad as it is sometimes called; on the west by the Dholka Pargane, and on the south and east by Mátar of the Kaira Collectorate-thus approaching in general shape a right-angled triangle, with the right angle at the village of Navápura Daskroi in its north-west corner. It is partly intersected and partly bounded by three rivers, the Sábarmati, the Khári, and the Meshva. The Sábarmati, after separating the 5 -illages in the north west corner-Navápura. Daskroi, Tájpur, Visalpur, Bákroly and Kásandra-froma the remainder of the district forms its entire western boundary down to ite most southerly point; with the exception of wheve ${ }^{n}$ it has changed its original course et Adásar. The Khári intersects the whole district from Hathijan in the north to Kaloli in the south, at which latter point it anites with the Sábarmati. The Meshva merely bounds 5 of the Jetalpur villages in the north-east corner before it flows in a southerly direction through the Mátar Pargandi
5. The geqlogical features of the district are not very remarkable. The surface of the whole northern portion lying to the east of the Sebarmati as far , south as Miroli, Timbha, and Bareja is more or lose undulating and in general well wooded, and the scenery, especiadly about Pirána, consequently more pleasing than in the districts lying ta the west of that river. At Pirana I was shown a piece of coarse calcareops sandstone which. Was said tó be found.in sinking wells in the neighbourhood, at a depth of from 20 to 30 cubits from the surface, but I had no means of tracing the formation. This is the only rock that occurs, sio far as I have been able to ascertain, in any part of the district, and I bave nover found it in the banks of the Sábarmati and Meshva, which are in many placea from 15 to 20 feet in height. In these banks the whole of the upper portion
consists of the ordinary gorddu or light-coloured sandy eoil, occasionally intermixed at some distance below the surface with kankar or nodular limestone. In the southern and eastern part of the district beyond Báreja; through which the Khári and its branches run, the soil becomes of a darker colour and more consistent texture, but it nowhere approaches the rich black of the south of the Dholka and north-east of the Dhandhuka districts.
6. The pargana is of so small an area, (about 110,840 acres, or 173 square miles), that the variations of climate, if any, are so alight as to escape notice, and, therefore, afford no guide in fixing the pitch of assessment for different classes of villages, so that the distance from markets is the only matter to be considered, so far as the assessment on dry-crop soils is concerned. The natural features of the country, however, furnish very safe criteria upon which to form a judgment as to the relative maximum values to be placed tupon the rice and garden lands of the villages in different portions of the district. Undoubtedly the most valuable garden lands lie in the low tracts liable to be overflowed by the freshes of the Sábarmati River. In these, generally known by the term of bhatha, the alluvial deposit is frequently so rich as ta admit of sugarcane, a crop which generally requires a large quantity of manure, being raised in it without any. The water of all the three rivers mentioned as partly flowing through the district is more or less used for raising irrigated crops, but the greater constancy of the supply of water in the Sabarmati and the greater fertility of the soil on its banks render the garden lands in the villages bordering on it generally of more value than those in the remainder of the district.
7. Again, the undulating nature of the surface of the country already mentioned has been taken advantage of for the formation of extensive tracts of rice beds in the natural hollows, which receiving and containing, as they do, most of the surface drainage of the country render the raising of crops of the superior varieties of rice produce a matter of tolerable certainty in all years but those of very scanty monsoons, and general failure of crops. The rice of the district, a great part of which is sold in the village of Bareja, is well known and sought after by dealers from Baroda and other distant places, and the general demand for it has led to the making of wells for the irrigation of the lands in large numbers.

8: What are called the "Khári villages," moreover, have the very great advantage of a never-failing supply of water for their rice from the Khári river, the water of which is prevented from ruming to waste by the permanent sluicegates orected by Government, and being raised to a sufficiently high level in some places by damming up with temporary earthen embankments is made to flow without further labour over large tracts of countrys The supply does not last, however, sufficiently long to admit of the irrigation of second crops without extra labour in raising the water by bullock power, so that its greater value generally over the supply in the rest of the district consists in its greater certainty, added in some instances to its bêing obtainable with but little labour from dams.
9. The revenue syistem of the whole district, especially that of the villages in the neighbourhood of the Khári River lately included from the Mátar Pargana, stands in great need of reform. Although there is not the same variety of revenue usages as we found existing in the adjacent district of Dholka, the jinnasvar bighoti or crop assessment still exists in 9 villages, and in 13 others, all but 2 lately belonging to the Kaira Collectorate, there are rates of assessment varying in different numbers, probably fixed at some former period by panchäits on some rough system of classification which does not appear in the village books. The settlement has evidently been very arbitrary in the first instance, and its administration now must be particularly troublesome, from the deductions made in the rates to reduce them from the original currency, in which they were fixed, to Company's currency having introduced fractional parta of annas to a most inconvenient extent. In Biráj the system was the narvádári as long as it suited the convenience of the narvádars, and that of division of produce when it did not. Of the remainder of the villages Mr. Jackson appears to have settled
 6 others had their rates revised two years later, 1 in $\frac{\text { gampot 1002 }}{1.5 .12146,4,}$ and 15 in

Diagram exthibiting the extent of Government $L$ and anmually under Cultivation for the Tast 30 Years in 57 Villages of the Jetaloore Aurgurna fits Gross $\mathcal{F}$ - Net Assessment.




EXPIANATYON.

1. The various iterns are measured by the scale of acres and Rupees carried across the Diagram.
2. The stomat of the darker colored portion of each coturnn indicates the rentad, and that of the lighter; the gross assessment on the cultimated area of Government liunds, the intermediate spaces shewing the amount of remissions.
3. The yellow tinesin each column show the area of Government landsin outtivation for the sever at years.
4. The summit of the bhe cotuonn shews the area of arable land as ascertained by the survey, and that of the yellow column the estimated grossruntal according to the rutesproposed.

## $\frac{2 n 00 n}{1097}$ whilst new rates were introduced in Badodra and Mahijda as late as 4.0.180.0.31, 1909 ad ra

10. The revisions of assessment that have taken place having thus been very partial in their operation do not afford separately sufficient grounds upon which to rest arguments as to the suitableness or otherwise of the pitch of assessment adopted. In the diagram No. 1 now forwarded I have, consequently included the returns of cultivation, \&cc, for all the 57 villages of the pargana. These returns I have been able to obtain in a tolerably perfect form for thirty
 to last year, in the figured statement which is Appendix A to this report. From the remark books of the former revenue survey of Gujarat and other sources I have collected information relating to former population, prices of agricultural produce, \&c., and deduoe the following general results.
11. 'In the villages whose names appear in the old survey remark books the total number of inhabitants appears to have been 39,412 in A.D. 1821-22: The names which are not found in these books being those of Malharpura and other hamlets founded since the date of the old survey, the returns may be fairly taken to represent the whole population of the district about thirty-six years ago. The returns collected by our classers show the total population to be 53,209 , or an increase over those of th8 old census of 13,797, or nearly 35 per cent.

 $\hat{3} \mathrm{D}, 33 \mathrm{~L}$ acres, or rather more than $10 \frac{1}{2}$ per cent. increase. You will recollect that in some villages of Viramgam, where the assessment had been light, the increase in less than twenty years had been about 69 per cent.
12. The fall that has taken place in the value of agricultural produce within the period for which the increase in population has been shown, has been considerable until within the last two or three years, especially in rice, the great staple produce of the district. The late high prices are attributable partly to the unusually high price of cotton which, being the chief article of export, regulates to a certain extent the prices of other descriptions of produce, and partly to the general rise of prices consequent on the mutinies. These causes are both exceptional, and cannot be expected to have a permanent influence over the value of agricultural produce.
13. I will fake the opportunity, presently, of showing, in a more convenient part of this report, that there is ample room for the extension of cultivation in the district. That the extension within the last thirty years, during which the country has enjoyed profound peace, has been of such a trifling extent as that shown above, notwithstanding the increase of the population by about 35 per cent., is traceable, it appears to me, to the generally heavy rates of assessment prevailing.
14. In thirty years the average realisations per acre on all cultivated lands throughout the district have been about Rs. 5-2-0. This is exactly the same as the average was in the most heavily assessed class of the Dholka villages, those managed under the jinnasvar bighoti or crop rate system, and the general average in the latter district was Rs. 3-15-4, or Rs. 1-2-8 below this, so that Jetalpur has, as a whole, been taxed much more heavily, than Dholka. In Dholka there was an actual decrease in cultivation, so that the slightly increased area in Jetalpur may fairly be set down to the greater increase of population in it over that in Dholka-in the one case 35 and in the other 22 per cent. ; and to the advantage possessed by Jetalpur in the greater number of markets available for the disposal of its agricultural produce. Nearly the whole of the increase, moreover, may be clearly traced to the effect of the increased water-supply afforded by the sluicegates lately erected on the Khári Rivèr.
15. The above-mentioned average shows the actual realisations. To form a proper judgment of the fitness of the general retenue system, however, it is necessary to consider the assessments. The average of these for thirty years has been about Rs. 1,58,028, whilst the average realisations have been only $1,50,043$, showing about Rs. 8,000 a year remitted or struck off the books as

## 138-

irrecoverable. For the last ten years this has increased to more than Rs. 9,500 a year. If we take into consideration the time and labour that must have been expended on the part of both European end Native authorities before these large remissions, made up of an infinity of small sums, could have been granted, and the opportunities for fraud such a system must have afforded to low-paid underlings, it is quite evident that its abolition will be cheaply purchased by the sacrifice of a certain amount of revenue.
17. In the figured statement, Appendix A, the amount of revenue realised is set down under the year to which it belongs in each case, but you must be aware that in very many instances it is collected many years subsequently to its first accruing. This will be seen by a reference to the statements of annual collections for the district. The grant of remissions is always kept down to the lowest practicable figure, and when that is shown to have been on an average Rs. 8,000 annually for thirty years past, the trouble of collecting a considerable portion of the remainder, except in particularly favourable years, may well be
 amounted respectively to Rs. 10,771, Rs. 13,169 , and Rs. 35,750 out of revenues of Rs. 90,137 , Rs. $1,21,234$, and Rs. $1,21,062$.
18. Having thus shown that the general pitch of assessment in the district is too high, I will proceed to state what reductions "appear to be necessary and the manner in which they should be carried out, with a view to equalise, as far as possible, those of different classes of villages more or less advantageously situated with regard to markets, \&c.
19. The principal market for the disposal of the agricultural produce of the district is undoubtedly the city of Ahmedabad, which, with its large military cantonment and numerous non-agricultural population, affords considerably higher prices for all descriptions of produce than any other market within the prosent reach of the cultivators. Those portions of the district lying nearest to Ahmedabad will, therefire, naturally have their maximum rates higher than the more distant parts. But a great majority of the villages themselves are large, and have among their inhabitants Banyas and other dealers in grain who make it their business to buy up their produce from the cultivators at first hand, and store if up, so as to take advantage of any market that may offer from time ta time. Jetalpur, Lali, Mahij, Kanej, Kasandra, Bareja, Navagam, and other villages have all of them more or less non-agricultural residents. Báreja, as already observed, is itself one of the chief marts for the sale of the rice of the district, and the existence of Kaira, Mátar, Mehmadabad, and other large towns in their immediate neighbourhood gives the cultivators of Jetalpur generally a great advantage over those of Dholka and the more remote parganas hitherto settled. The soil, moreover, being of very uniform fertility throughout, the variation of maximum rates of assessment for dry-crop soils in the different classes of villages need not be great.
20. The maximum rate for dry-crop soils adopted in Dholka was, as you will recollect, Rs. 2-4-0 per acre in the 1st class of villages. For the reasons stated above, I propose to fix the maximunirate of the great body of the Jetalpur villages at 4 annas the acre higher than this, raising it to Rs. 2-12-0 in villages in the more immediate neighbourhood of Ahmedabad, and lowering it to Rs. 2-4-0 and Rs. $2-0-0$ per acre in a few villages not so favourably situated as the rest with regard to markets.
21. The following is the classification of villages I propose to adopt on the above considerations:-

1st Class.-Re. 2-18-0 per acre.

1. Sahijpur.
2. Lámbhá
3. Lakhmipura,

Ynd Olass.-Re 2-8-0 per acre.

1. Bakrol.
2. Visulpar.

2nd Class.-Rs. ©-8-0 per area-continued.
3. Paldi,
4. Kamod.
5. Od.
6. Giramtha.
7. Naj.
8. Jetalpur.
9. Asláli.
10. Chosax

Ind Class-Re. 8-8-0 per acre-continued.
11. Gámdi
12. Devdi.
pl3. Hathiján.
14. Badodrs.
15. Dhámatván.
16. Jinjhar.
17. Rohisa.
18. Rúska.
19. Kanej.
20. Nándej.
21. Bárejdi.
22. Istolábad.
23. Mahij.
24. Láli.
25. Biraj.
26. Bareja.
27. Wasái.
28. Mahijda.
29. Pinglaj.
30. Kánera.
31. Malhárpura.
32. Goblej.
33. Pȧn8oli.
34. Navágám.
35. Chanindra.
'2nd Class-Rs. 2.8.0 per acre-continued.

$$
\begin{array}{ll}
\text { 36. Kaioli. } \\
\text { 37. } & \text { Náelka. } \\
\text { 38. } & \text { Shetra. } \\
\text { 39. } & \text { Dámri } \\
\text { 40. } & \text { Bheraí. } \\
\text { 41. Duthál. } \\
\text { 42. } & \text { Wadála. }
\end{array}
$$

Srd Class.-Rs. 2-f-0 per acre.

1. Undrel.
2. Harniév.
3. Bhurál.
. Hirapar.
4. Navápura (Daskroi)
5. Kásandra.
6. Miroli.
7. Navápura (Dholka).

Timbha.
10. Katvára.
11. Chitrásar.

4th Class.—Rs. 8-0.0 per acre.

1. Tajpar
2. According to the details of dry-crop, garden, and rice cultivation shown for the last ten years in Appendix A, the average assessment on dry-crop soils has been about Rs. 2-7-4 per acre. Deducting from this 6 per cent., which the average remissions for the same period nearly come to, we have Rs. 2-4-11, or say Rs. 2-5-0, as the average realisable assessment per acre of dry-crop soil for the whole pargana.' The average classification being not quite 12 annas, the average reduction per acre will be about one-fifth if we take Rs. 2-8-0 as an average maximum rate for the district.
3. With regard to the assessment of rice lands, Although the nature of the water-supply necessary for this species of eultivation is such as to render the - ripening of a crop annually on the Khari below the sluices and in lands under wells tolerably certain, there is still a large quantity of land in the district dependent entirely on the fall of rain. I have, therefore, considered it advisable to adopt the same plan of assessment as in Dholka and Viramgám, namely, that of keeping the dry-crop and the water rates of assessment separate, with a view to facilitate the granting of remissions in years when the monsoon fails, where such may be required.
4. The present bighoti rates of assessment on rice lands in the district are very high, being in Miroli equivalent to Rs. 15-3-6 per acre, and ranging in many other villages from Rs. 13-8-0 to Rs. 14-8-0. Having, moreover, been fixed from time to time by means of different agencies, they are not at all in proportion to the relative values of the lands in different localities, and with various water privileges. Fixing on Báreja as the best rice market in the pargana, and that of Navagam as that in which there is the greatest probability of a good rice crop in addition to a second crop of wheat or barley being obtained annually with the least amount of labour, and taking into consideration the line of undulating country which admits of the cultivation of rice in the bottoms already mentioned, I think that the following classification of the rice villages of the districts will meet all those general requirements of the assessment that will not be provided for by the classification of water made by the Survey Depart-ment:-

| 1at Class. |
| :---: |
| 1.Navagam. <br> Ind Claps. |

Srd Clabs.

1. Náeká.
2. Bherái.
3. Duth6).
4. Kanera.
5. Goblej.

## 138-6

Srd Olase-continued.
6. Chanindra.
7. Katvára
8. Báreja.
9. Timbha
10. Wasai.
11. Miroli.
th Class-

1. Dumri.
2. Shetra.
3. Wadala.
4. Malharpura
5. Mahijda.
6. Naj.
7. Giramtha.

6th Clase.

1. Lámbha
2. Asláli.
3. Jetalpur.
4. Od.
5. Chobar.
6. Gámdi.
7. Devdi.

8: Bárejdí.
0. Hathyar.
10. Nendej.
11. Kanej.
12. Mahij.
13. Láli.

5th Class-continced.
14. Biraj.
15. Chitrásar.
16. Kaloli.

6th Class.

1. Ráska.
2. Dhámartán.
3. Badodra.

7th Clasa
3. Harniár.
2. Hirápor.
8. Robiss.
4. Jinjhar.
b. Bhuval.
6. Undrel.
7. Istolabad.
8. Kamod.
9. Páldi.
10. Visalpur.
11. Lakhmipurs:

8th Class.

1. Navápara (Dholka).
2. Bakrol.
3. Kásandra..
4. Navápura (Daskroi).
5. Tajpar.
6. Sahijpur.
7. The maximum water rater which I propose for these classes respectively are as follows :-

8. The maximum proposed for Navagam would give a maxitunm per acre of Rs. 12-8-0 where the 'soil was of the best quality and the supply of water obtainsble without labour in the raising sufficient for growing two or sometimes three crops in the year. I need hardly say, however, that the supply from the Khári River never is so abundant as this, although a great deal of the water. has been classified as if it were so.
9. I have recommended to Government, through the Revenue Commissioner, N. D., that the whole of the water classification of the district should be cancelled and done over again, and I expect that, after this revision has been carried out, the highest rate per acre in Navágám and the neighbouring villages on the Khári will be about Rs. 10-8-0, inclusive of the dry-crop assessment. The average assessment' on rice lands in the district for the last ten years, as shown by Appendix A, is Rs. 7-4-11 the. acre, but as all rice lands under wells have been entered in the statement as garden lands it will be fairer to take an average of the two. This gives Rs. 7-12-6 as the average assessment for irrigated lands, from which, after deduction of 6 per cent. as in the case of dry-crop soils, we get about Rs. 7-5-0 the acre as the actual average realisable assessment under the present system. The maximum of Rs. 10-8-0 shown above will, therefore, operate as a considerable relief to the cultivators and still be about Rs. 2-0-0 the acre higher than the heaviest rate imposed in Dholka.

## - 138-7

28. The water in the wells of the Jetalpur Pargana'being less liable to turn brackish than in those in the country lying to the west and north-west of the Sábarmati, and the rights to the water of the several wells being in most cases well defined, it has been found practicable to place permanent garden land assessment apon the lands under the wells throughout the district, instead of placing a separate tax upon the water bags, as hitherto done. The principle upon which this has been carried into effect is strictly that laid down in the Joint Report. A fair maximum having been fixed as that of the quantity of land that ordinarily can be watered from a common water bag worked by one man with a pair of bullcoks from a well of which the water is got at a reasonable depth from the surface, say from 6 to 8 yards, the shares according to which different individuals have a right to take the water, and the fields into which they do or may take their shares have been carefully ascertained, and a certain portion of the land thus in possession of each man has been entered and assessed as garden land in the proportion that his sbare of water from the water bag may bear to that drawn by the whole bag. Where there exists a right to take water from certain wells or water bags of wells into several numbers without the share to be taken into each being clearly defined, I have apportioned the total quantity of land fixed as capable of being watered on the whole of the numbers in proportion to their areas. In cases where a portion of the water of a well is taken by right for the irrigation of rice lands, allowance bas been made in fixing the amount of garden land under the well.
29. Having thus fixed a certain amodint of garden land under each well, I have been guided in fixing the assessment by the various circumstances which affect the relative value of such lands. These have been considered in each individual piece of land, the nature of the supply of water varying according to the quality, depth from surface, \&c. ; the quality of the soil as shown by the survey classification; the distance of the field from the village; and the quantity of land assessed at dry-crop rates left for rotation of cropping, deduction from the maximum rate having been made in every case in, which the quantity of drycrop land associated with the garden land did not at least equal the latter. By these means and by apportioning the reductions from the maximum rates in such a manner as to bring down those in which the quality of the soil and of the water were both inferior nearly to the level of the dry-crop assessment, I have endeavoured to equalise the irrigated assessment of the whole district consistently with a due regard to the advantages or disadvantages of each village. The maximum rate of assessment I propose for the district is Rs. 8-8.0 the acre, but this would only be reached in rare cases in the highly productive bhatha lands already mentioned, in which the classification of the soil has raised it to nearly one-fourth above the ordinary maximum of 16 annas. The rates have very seldom reached Rs. 8-0-0 the acre, and are in many cases below Rs. 2-8-0, so that the average will certainly not exceed 5 Rs. This is a considerable reduction below the average of Rs. $7-5-0$ shown above, but it is, in my opinion, necessary in order to encourage the continuation of garden cultivation in those lands already provided with wells, and prevent their being thrown for the purpose of the cultivation of fresh lands, in which I have no doubt new wells will be sunk in large numbers under-the operation of the revised settlement.
30. Captain Cowper, the Superintendent of the Survey Department, has lately urged, as an objection to the plan of settlement of garden lands thus described being substituted for that of taxing the water bag hitherto adopted, that it will in all probability be evaded. A moment's reflection will convince any person who understands the details of revenue management that the present plan is the best, because it leaves no uncertainty as to the amount of the Government demand, and does away with the necessity of an annual inspection of fields, and you are aware that it would have been adopted long ago had not peouliar circumstances prevented its adoption in the districts previously settled. Except in rare cases, the water from a certain well is only required or can only be conveyed to a certain number of fields which have been clearly ascertained and assessed accordingly, and there is no probability of any attempt at evasion where the rates of assessment are fair.
31. It will still be necessary to continue the plan of taxing the water bag .n the case of water being drawn from the different rivers where masonry work
has not been employed to strengthen the banks, and thus confine the use of a water-bag permanently to one stop. In the latter cases the exact fields to which water can be taken have been ascertained, and assessment imposed accordingly; but in the former the position of the water-bags not being fixed, renders the determining of the lands that can be watered from them impossible. The rates I propose are Rs. 12 the bag for water drawn from the Sábarmati and Rs. 8 for those used on the Ehari and Meshva rivers, on account of the inferiority of the water of the latter rivers to that of the former, both in quantity and suitableness, for the raising of garden crops.
32. With the exception of a few villages, in which a rupee per bigha of cultivation has been levied for the use of water from the Khari, it has not been the custom to levy water rates upon alienated lands for water taken from Government sources of irrigation. I propose to extend the system of leaving the waterbag rate for water drawn from these rivers to all lands on which permanent garden assessments have not been fxed, and where such have been fixed to levy the difference between the dry-crop and the irrigated land assessment from every number into which water may be conveyed. The latter applies to rice as well as garden lands. A good deal of opposition to this may be expected, especially from the holders of vanta lands extensively watered from some parts of the Kbari River; but this should, in my opinion, be firmly met. The plan has been carried out in Dholka and the other settled districts, and as the principle that the water of all rivers belongs to the State is a sound one, that can be maintained in any Court of justice I do not see why the opportunity of raising extra revenue from this source should be neglected. The source of revenue is doubly legitimate when, as in the case of the Khári sluices, the funds of the State have been expended in the improvement of the means of irrigation from which the holders of alienated land have hitherto derived large profits gratis.
33. It has been customary in some villages to levy 1 or 2 rupees per bigha whenever water was taken from a Government well into land not assessed at garden rates under that well. The present settlement having fised a fair quantity of garden land under each well according to its capabilities, those paying the garden land assessment will have the option of allowing or not allowing the water to be taken out of their lands, and no further tax will be levied for the use of the water. Three acres and a half being the maximum area assessed as garden land per water-bag for the most part, parties having right to water and paying a certain amount of garden assessment accordingly will, no doubt, take large advantage of the system to sell their water to others, and thus lessen the pressure of the assessment on themselves.
34. The following will be, as far as I can estimate in the present incomplete state in which the wrong classification of water in rice lands has left the settlement, the general result of the rates of assessment proposed :-

|  |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | :---: | :---: |

The general maximum dry-crop rate in the district having been proposed at Rs. 2-8-0, I have taken Rs. 1-12-0 as the average assessment in this calculation. Not having returns made out which would show the exact quantity of alienated and waste among the garden lands, I have estimated 1,000 acres on these accounts, and calculated the assessment on the remaining 3,145 acres at Rs. 4-8-0 the acre. The average assessment on rice lands, inclusive of water rates, I have estimated at Rs. 6 per acre. At these rates the assessment of the cul-


EXPLANATION.

1. The summits of the dariker coluonns shews the arex irv acrer of ationated Land undor cultivation,

- and that of the lighter the comont of assesment in the shoppes of yuit rente and casses.

2. The summit of the blue coturno shavs the total arrable arean of ationated lanet as
ascertained by the surveg.
tivated area will a mount to about Rs. 1,28,765, which would be a decrease on the average realisations of the last ten years (Ks. 1,53,344) of about Rs. 24,579, or slightly more than 16 per cent. Calculating the probable ultimate increase on the lands now waste being brought under cultivation, the margin left would bring the proceeds from Government lands alone about up to 2 lakhs. This is exclusive of the revenue to be derived from fruit-trees, grass lands, and those lands in or near the beds of rivers in the district which although yielding near from Rs. 7 to Rs. 8 the acre it has been considered advisable to place no permanent assessment on, but leave tơ be sold by auction annually in consequence of their being liable to be washed away, or their quality deteriorated by floods during the monsoon. I anticipate also an increase of about Rs. 10,000 from the levy of water rates upon alienated lands watered from the Khári River and other sources of irrigation, the property of Government. If the estimates thus made should prove a few thousand rupees above the mark even, there can be no reasonable doubt that the imwediate reduction in the receipts will very soon be made up, and that within the next five years the proceeds of the district will be considerably in excess of the average of former years.
3. The second diagram forwarded with this report shows the quantity of alienated land in cultivation as compared with the total area. It would be impossible, without great expense and trouble, to ascertain exactly the area upon which the quit-rents, \&c., shown in column 3' of Appendix A were levied, as, some are levied upon waste land and some are not; but by showing the amount as an average upon the whole area I find the average assessment imposed has been about Rs 1-7-6 the acre. With this average assessment I find that for thirty years very nearly 20 per cent. of the total area liable to pay quit-rents, \&c., has lain waste annually. Taking into consideration that a considerable portion of this assessment has been derived from heavy rates imposed upon the cultivation of valuable garden crops, I think we may fairly draw an inference, from the facts now stated, that any higher mates of assessment than those now proposed would not have the effect of securing that healthy extension of cultivation which we desire to bring about in the Government lands of the district.
4. In consequence of the uncertainty which still exists with reference to the re-classification of rice lands, I do not propose to ask Government for the usual guarantee for the permanency of the settlement for thirty years, but that for the present the rates may be considered experimental.

I have, \&c.,
A. ROGERS.

No. 1952 of 1859.
From
E. G. FAWCETT, Esquire,

Revenue Commissioner, N.'D.;
To
A. ROGERS, Esquire,

Settlement Officer, Gujarát.
Revenue Commissioner's Office, Poona, 4th October 1859.
Sir,
I have the honour to acknowledge the receipt of your memorandum No. 140, dated 16 th instant, forwarding copy of your report to the Collector of Ahmedabad on the revision of the assessment of the Jetalpur Pargana.
2. It would have added greatly to the usefulness of the document were the general results giden in paragraph 31 made also upon a calculation with reference to the classification of the soils, as well as an average assessment which в $362-\mathrm{c}$
you have assumed at Rs. 1-12-0 per acre. It is not improbable that a conclusion so arrived at may materially affeet the comparison between the present and proposed assessment, and I have, therefore, to request that you will be good enough to submit a table calculated according to the rates falling upon each description of land.

# I have, \&c., <br> E. G. FAWCETT, Revenue Commissioner, N. D. 

No. 160 of 1859.
To

S. MANSFIELD, Esquire, Revenue Commissioner, N. D.

Camp Kura, 14th October 1859.

## Sir,

With reference to Mr. Fawcett's letter to my address, No. 1952, dated 4th instant, I have the honour to state that the rate of Rs. 1-12-0 was used in the calculation as representing at a maximum of Rs. 2-8-0 the value of soil classed at 11 annas or thereabouts, as I considered that about the average classification of the dry-crop soils of the district. Since my report was written I have had the actual assessments at the rates mentioned completed for the whole district, and can, therefore, now furnish a more accurate estimate of the result of their adoption. The assessment of the total area of Government land in dry-crop soils comes to Rs. 73,062 ; in garden lands to, Rs. 13,852-4-0 ; and in rice land to Rs. 1,29,122-12-0, making a total of Rs. 2,16,137, or nearly Rs. 16,000 in excess of what my former estimate came to. You will perceive that the principal item of difference is that of the assessment in rice lands, and as it is most probable that the classification of water used for irrigation of rice lands in the villages situated on the Khari River will be generally lowered, my first estimate will certainly not prove very wide of the mark.

# I have, \&c., 

A. ROGERS.

$$
\text { No. } 2619 \text { of } 1859 .
$$

From
S. MANSFIELD, Esquire, Revenue Commissioner, N. D.;
To

> J. W. HADOW, EsquIRe, Collector of Ahmedabad.

Camp Ahmedabad, 31st December 1859.

## Sir,

I regret to find that the outstanding balances in the Jetalpur district amount to Rs. 34,108-7-1. Of this sum Rs. 25,542-10-3 are due for last year-the year in which the survey rates were introduced for the first time. The cause assigned by the Mámlatdár for the balances of last year are three-fold :-

1st. On account of rayats not paying up in expectation of their assessment being reduced by the survey, in which, however, they were disap. pointed;

2 nd . On account of rayate who did not pay up, in expectation of receiving remissions for loss of crops, which they did not get;
$3 r d$. On account of rayats who planted sugarcane, and who, under the old system, would not pay revenue until the current year.
2. The survey assessment for the year $1858-59$ was Rs. $1,59,576$, of which 16 per cent. has remained outstanding. During the last twenty-tive years the revenue survey has been, in progress in the different collectorates of the Bombay Presidency, and I may safely say so very unsatisfactory a settlement has never taken place. You will be so good as to obtain from Mr. Rogers a full explanation of such a state of things, for the purpose of being transmitted to Government.

> I have, \&c.,
> S. MANSFIELD, Revenue Commissioner.

## No. 4 or 1860.

Ahmedabad Collector's Office, 2nd Jonuary 1860.
Forwarded to Mr. Rogers, Settlement Officer, with the request that he will be good enough to furnish the explanation called for by the Revenue Commissioner.

J. W. HADOW,<br>Collector.

No. 37 of 1860.
To

## T. WEEDING, Esquire,

First Assistant Collector in charge Áhmedabad:

$$
\text { Camp Nagina, 26th January } 1860 .
$$

Sir,

$$
\therefore
$$

With reference to Mr. Hadow's endorsement dated 2nd instant, No. 4 of 1860, forwarding for my report copy of Mr. Mansfield's letter No. 2619 of 1859, dated 31st ultimo, I have the honour to state that the main cause for such large bolances remaining outstanding in the Jetalpur Pargana last year was the late period of the season at which, in consequence of almost the whole of the enquiries relating to garden lands made during the previous year turning out to be useless and having to be done over again, I was able to fix the rates of assessment and have the settlement papers prepared. This has been fully reported on to Government, and was one of the causes that led to the removal of the late Superintendent of the Survey from his appointment. The three reasons mentioned in the Revenue Commissioner's letter are also correct to a certain extent.
2. Detailed explanation of the amount of reduction in the revenue and of the remissions granted will be submitted in my report on the introduction of the settlement into the district. It is a difficult district to collect money in at all, and the uncertainty prevailing as to the amount they would have to pay under the revised settlement had, I do not doubt, the effect of making the cultivators hold back more than usual. Ultimately the balance that will be outstanding will, I am convinced, be very trifling.

I have, '\&c.,

Original report from A. Rogers, Esquire, Settlement Officer in Gajarit, No. 137. dated 10th September last, relative to the revision of assessment of the Jetalpur District.

No. 1609 or 1859.

> Ahmedabad Collector's Office, 28th December $18 \overline{0} 9$.

Submitted for the consideration of the Revenue Commissioner, N. D.
2. Bearing in mind the professed object which the Settlement Officer has in view in making reports of this nature, namely, to obtain the previous sanction of Government or the Revenue Commissioner for the settlement, experimentally

- for one year or more, of the pargana reported on, according to his proposed rates, this report should have been submitted at an early period of the season, instead of months after its close, and after the revision had been carried out in anticipation of the sanction of Government.

3. The delay in submitting the report is attributed by the Settlement Officer to the late period at which he received the statements relating to garden lands, but the Collector does not understand why this should have interfered with the preparation of the papers for the other lands, and necessitated the postponement, until the season was nearly at its close, of the introduction of the settlement according to the rates which had been fixed for these lands.
4. That suich delay should have occurred, is much to be regretted on several considerations: It has prevented the closing and adjustment of the whole revenue accounts of the collectorate, and in consequence of the lateness of the season at which the settlement was commenced the important duty of explaining to the cultivators the amount of his sunvey assessment, the difference between their payments under the old and new system, seeing the amount duly entered in each khata and other details devolved on the Assistant in charge of the district, instead of being performed, as it should have been, by the Settlement Officer himself.
5. It appears, moreover, from what Mr. Rogers states, that the classification of the rice lands is entirely wrong, and that a re-classification will have to be made.
6. Pending Mr. Rogers' report, which, it is presumed, he intends to furnish as early as practicable, on the result of the experimental settlement he proposes to make for the present season, with such modification in the rates as may be found necessary on the completion of the re-clasgification of the rice lands, the Collector considers it would be premature and only tend to lengthen correspondence were he, at the present stage of proceedings, to offer any opinion or observations on the subject,
7. The Colle日tor has no objection to the classification of villages proposed in paragraphs 21 and 24 ; bit the rates proposed for the dry-crop soils of the 1st and 2nd class villages appear high, and he can perceive no sufficient reason, in what Mr. Rogers has advanced, for fixing them higher than in Dholka.
8. In conclusion, the Collector would beg to suggest that Mr. Rogers' report, on the effect produced by the new rates of assessment introduced by him in anticipation of the sapction of Government, be awaited, and that the question, whether a further experiment be necessary or whether the usual application be made to Government for the permanency of the settlement for thirty years, be then determined. At present the report does not, in the Collector's opinion, contain the requisite data and details, to enable Government to decide on the adoption of the proposed rates for the rice and garden land.

From

A. ROGERS, Esquire,<br>Collector of Ahmedabad;

To

> S. MANSFIELD, Esquire, Revenue Coumissioner, N. D. $\quad \because \quad$ Camp Dholka, 19th April 1860.

Sir,
In reply to your letter of 2nd instant, No. 728 of 1860, I have the honour to inform you that the water classifioation of the rice land in the villages on the Khári River has been done over again according to rules subsidiary to the old scale revised by Captain Prescott and myself. Some of the other villages, in which the water classification was reported to be faulty, have also been tested, but much yet remains to be done in this respect ; and as the only person available for the duty of taking the necessary test in the absence of Mr. Bulkley, on sick leave, is the Superintendent himself, I fear it will be the end of the season before this is completed. Captain Prescott has, however, promised me a report on the revision of the water classification in the former villages, and the effect of that revision on the revenue in from a forthight to twenty days and as the effect of the re-examination in the rest of the district will probably be to reduce in some places and in others to increase the assessments, the information now promised will suffice to admit of your forwarding my proposals for the general revision of assessment, with your opinion on their suitableness or otherwise.

|  | I have, \&e., <br> A. ROGERS, <br> . Collector. |
| :---: | :---: |
| No. 170 or 1861. | $\because$ |

To

> A. ROGERS, Esquyre,
> Collector of Ahmedabad,

Camp Bombay, 26th January 1861:
Sir,
With reference to your letter of the 19th April last, No. 485, I have the honour to request that you will state the probable date by which I may expect to receive the report therein promised.
2. It is anything, but creditable to yourself and Captain Prescott that so great a delay should have been allowed to occur in the preparation of a single report.
3. The correspondence relative to the revision of the assessment of the Jetalpur Pargana being very straggling, I request you will be good enough to instruct Captain Prescott to re-cast the whole (including the report alluded to in paragraph 1 above) into one report, for submission to Government. I need scarcely -remark that essential points only as regards jiraít and bágáit should be allowed place in it.

I have, \&c.,
S. MANSFIELD, Revenue Commissioner, N. D.

From
A. ROGERS, Esquire, Collector :
To
S. MANSFIELD, Esquire, Revenue Commissioner, N. D.

Ahmedabad Collector's Camp Kamod, 5th February 1 b 61.

Sir,
With reference to your letter of the 26 th ultimo, No. 170 of 1861 , I have the honour to inform you that I have not as yet been informed by the Survey Department of the alterations in assessment caused by the revision of the water classification in the Khári River villages, the papers relating to which were, I believe, only completed a short time ago, and the new rates explained to the cultivators.
2. I have written to the Superintendent on the subject, and his report when it reaches me will not be delayed longer than to allow time for me to make any remarks it may appear to require at my hands. Captain Prescott had informed me, before I wrote on the 19th April last, that he would only be able to prepare for settlement, during the season, the papers of a few of the villages, and I presume it is only the pressure of other business that has since caused the delay in the preparation of the papers in the remainder of them.

> I have, sce.,
> A. ROGERS,
> Collector.

$$
\text { No. } 90 \text { op } 1861 .
$$

From<br>Captain C. J. PRESCOTT,<br>Superinteadent, Revenue Survey and Assessment, Gujarát;<br>To

> A. ROGERS, EsquIRe,
> Collector of Ahmedabad.

> Camp near Ahmedubad, $24 t / 4$ March 1861.

Sir,
With reference to paragraph 3 of may letter to youmbddress, No. 79 of the 16th current, I have the honour of submitting a précis of the correspondence relating to the revision of the báydát and rice water classification of the pargana of Jetalpur in your collectorate.
2. This correspondence commenced by the Settlement Officer calling the attention of Government to the careless manner in

Bettlement Officer's - letter to Revenue Commissioner, N. D., No. 114 of 30th July 1859. which the bagait takhtás of Jetalpur were prepared when he observed that "the different shares of water held in wells by different individuals, and the lands into which those shares were respectively taken for irrigation, were at first in many instances not entered at all in the statements furnished." In his 9th paragraph the Settlement Officer observes that the classification of rice in Jetalpur is so entirely false as to render any assessment imposed
according to it most inequitable. In his 10th paragraph the Settlement Officer says: " I referred to the original classification books whenever rice numbers were put down as deriving water by right from the well the land of which I was about to fix and assess, to see whether the numbers had been classified accordingly. It was at once apparent that in almost innumerable instances such had not been
the case. Rice lands proved by the garden land statement (bagaít takhta) to be under wells (kuvetar) were classified in, I believe, every village in the district as deriving water from the heavens alone (akáshya), or put down under wrong wells, or the quality of the water of the well was put down wrong, whilst in many cases the places where the numbers of the wells should have been entered in the books were left blank, so that $\mathcal{L}_{\text {c }}$ could not tell where their water came from." The Settlement Officer next notices in his 11th paragraph the classification of water in villages getting their supply from the Khári River from which water is derived from sluice-gates, and permanent and temporary embankments built to retain the water. These appliances have the effect of making a supply of water sufficient for rice cultivation, even in years when the monsoon is scanty, a tolerable certainty, and in some cases in lands peculiarly placed ensure a second crop of wheat or barley after the rice is reaped, with but little labour in raising water. In no case are crops such as sugarcane or any more valuable than wheat or barley raised. The lands on the Khäri, therefore, are more valuable than other rice lands under wells with sweet water by so much as the cost of raising water from the wells exceeds that of getting it flowing from sluice gates or embankments, the crops raised in the Khari villages being no better nor larger than those raised under wells in other parts of the district. The error that has been made in classification has been that of putting the water of the Khári proportionally far too high in comparison of that of sweet wells. A large proportion of the classification of water in the Khári vilages is from 8 to 12 annas in excess of that of sweet wells in other parts of the district, thus making a difference in the assessment, at a maximum rate of Rs. 10, of from Rs. 2-8 to Rs. 5 the acre.
3. To these statements Captain Cowper replied at great length, but the

Resolution of Government No. 3785 of 26 th September 1859. the correspondence to Government with his endorsement No. 1904, dated 29th September, states that he is not in a position to offer any special remarks on the statements set forth by Captain Cowper with reference to what has been urged by Mr. Rogers, they being mostly of a very technical character. As Captain Cowper has been removed from the office of Superintendent, these matters may be left to the consideration of Captain Prescott and Mr. Rogers, between whom it is hoped and trust there will be more unanimity and cordiality of co-operation.
4. Upon this Government recorded the following Resolution, No. 3971 of 6th October 1859 :-" The only point in Captain Cowper's letter which requires further remark is whether the Jetalpur classification should be done over again. On this point the new Superintendent should be directed to consult with Mr. Rogers, and it is hoped

Forwarded with Revenue Commissioner's endorsement No. 1996 of 7th October 1859. correspondence ended in the Resolution of Government removing that officer and appointing me Superintendent. 'The kevenue Commissioner, N. D., in submitting Government with his endorsement No. 1904,

[^7] 1 d expense which would be incurred by going ever the whole again." I carcfully inspected the classification papers of Mr. H. Bulkley, No. 326 of pur, and on the 19 th idem I forwarded a copy 19th Octoher 1859. above-quoted Resolution to Mr. Harrington Bulk Penor with the following remarks and instructions:-" Reported to Revenue Rogers complains that the classification is altogether Commiasioner, N. D., in inequitable; thatrice lands under wells have been clas fusion worse confounded. ed by going ever the whole again."
Department (10th of October 1859)
Jeta
On
"It is most difficult for a stranger to imagine how such unheard of mistakes could have occurred, and from the Resolution before us it would appear that Government even is scarcely aware of the extent of the faults committed.
" I must confess that I almost agree with Mr. Rogers that a new classification seems inevitable; but, for fear Government should think we have acted without due deliberation, I have come to the conclusion that a large test of, say, a dozen villages should be taken as soon as possible by yourself, when, if it should be found that the former work is utterly untrustworthy, the classification of the rice and bágáit of the whole pargana must be commenced de novo."
"You can subject any villages you like to this test, reporting the result to me for the information of Government. Your own judgment and experience will soon enable you to decide whether the remedy in the above-quoted Resolution of Government is feasible. In case we should be obliged to re-classify Jetalpur, great descredit will be reflected on this Department, which will tend to make the rayats look upon our operations with suspicion. Yet it will at the same time convince them of the earnest desire of Government to introduce an equitable assessment, regardless of expense.
"The maps of Jetalpur are with the Mamlatdár ; the field books, classing books, takhtds, and papers connected therewith will be forwarded to you, to enable you to compare the old classification with the tests you make; but, in the event of your deciding that a re-classification of the whole district is unavoidable, you must take care to prevent the possibility: of the old classing daftar being tampered with, or made use of in any improper way, and you must see that it is. safely locked up in some secure place where no one will have access to it without your permission. As in the event of a new classification the present classification of jiraít lands will remain intact, I think you will find it facilitate the operations of the new classification if you have a correct takhta made of all the rice and bagait numbers of each village which have to be re-classed, leaving out the jirait numbers which will stand as they are. By this means you will have no occasion to interfere with the existing shej."
"However it is needless to enter into minute detail to an officer of your experience."
"I should trust that all errors connected with the division or clubbing of numbers in Jetalpur have been fully corrected, but in case they have not, it is necessary that I should give you some clear instructions on the subject so as to prevent the possibility of further mistakes, and to that end I will make them as simple as possible, namely :
"Fields are to be left in statu quo (although they may not be divided strictly according to rtle), provided that there is no admixture of tenure which would interfere with the settlement. For example : supposing it is found that there are two adjoining numbers under one occupancy, which, according to the rules, should have been made into one number, such numbers should not be interfered with, but allowed to stand. In short, the settlement must be looked to, and when there is no impediment to that, it is better to allow a little latitude in area than attempt corrections which are sure to be attended with much trouble and confusion, and can be $\rho$ f no practical utility.
"But I am sure you will agree with me that if any, alterations have to be made, they must be made at once on the spot, and on the very day they are dis. covered, so that no possible confusion may prevail."
6. To this letter I received the following reply, dated the 3rd January 1860:-
"With reference to your letter No. 326 of 1859 and accompaniments, I have the honour to inform you that as soon as I had by personal test satisfied myself of the general accuracy of the classification in Matar I proceeded to Jetalpur Pargana to carry out your instructions regarding the test of the water classification of that district. The result, I regret to say, establishes the existence of numerous and grave errors as reported by Mr. Rogers in his letter to Govern. ment. These errors, however, are not of sufficient magnitude to necessitate the re-classification of the entire district. The "annavar" value of each number has on the whole been fixed very fairly. It is in the supply, in a few instances
the quality, of the well water that errors have been detected. It will be sufficient, in my opinion, to revise the original classification merely. For this purpose the old books might be made over to my men, and all errors discovered by them corrected, as well as additional information regarding water-supply entered by them in the same in red ink.
"I have not yet received reports from the whole of my establishment regarding the probable duration of their present work; consequently I am unable to speak positively as to the number of men I shall have available for the revisia of the Jetalpur classification, or the exact period at which their services may ve reckoned on. If the Settlement Officer will be good enough to inform me, through you, by what time he desires the work to be completed, I will make every endeavour to meet his wishes. The sooner this information is furnished the better, to enable me to make the necessary arrangements.
"Test returns of each village examined are appended. I have not taken quite so large a test as suggested in your letter under reference, as such would have been impossible considering the time I was engaged on this duty. I trust, however, that the amount of error detected is sufficient to establish the general inaccuracy of the water classification, and necessitate its revision."
7. Very early in January the Settlement Officer and myself met at Goblej, in the Jetalpur district, and proceeded to examine the classification of the villages receiving their supply from the Khári River. Before entering into any explanation of the nature of the faults we there discovered in the water classification it is necessary to examine the diagram given below, which will help to elucidate the same:-

8. The above represents a section of the Khári River (A), and a plan showing ground irrigated from it ( B and C ).

The blue line shows the highest point which flood water would reach to be . elassed as resting water (technically called "baitha páni").

The yellow line shows the ordinary level of flood water.
The red line shows the probable extent of land which could get water by lifting for a second crop.
9. It is necessary to premise that the Khári River villages are famous for the production of a superior description of rice called pankhali and kamod, which answers very nearly to the amba mohur of the Deccan, which cannot be produced
the quality, of the well water that errors have been detected. It will be sufficient, in my opinion, to revise the original classification merely. For this purpose the old books might be made over to my men, and all errors discovered by them corrected, as well as additional information regarding water-supply entered by them in the same in ted ink.
"I have not yet received reports from the whole of my establishment regarding the probable duration of their present work; consequently I am unable to speak positively as to the number of men I shall thave available for the revision of the Jetalpur classification, or the exact period at which their services may be reckoned on. If the Settlement Officer will be good enough to inform me, through you, by what time he desires the work to be completed, I will make every endeavour to meet his wishes. The sooner this information is furnished the better, to taable me to make the necessary arrangements.
"Test returns of each village examined are appended. I have not taken quite so large a test as suggested in your letter under reference, as such would have been impossible considering the time I was engaged on this duty. I trust, however, that the amount of error detected is sufficient to establish the general inaccuracy of the water classification, and necessitate its revision."
7. Very early in January the Settlement Officer and myself met at Goblej, in the Jetalpur district, and proceeded to examine the classification of the villages receiving their supply from the Khári River. Before entering into any explanation of the nature of the faults we there discovered in the water classification it is necessary to examine the diagram given below, which will help to elucidate the same:-

8. The above represents a section of the Khari River (A), and a plan showing ground irrigated from it ( B and C ).
-
The blue line shows the highest point which flood water would reach to be. classed as resting water (technically called "baitha páni").

The yellow line shows the ordinary level of flood water.
The red line shows the probable extent of land which could get water by lifting for a second crop.
9. It is necessary to premise that the Khári River villages are famous for the production of a superior description of rice called pankhali and kamod, which answers very nearly to the amba mohur of the Deccan, which cannot be produced

- 362-e
in perfection, not even under the sweetest well, except by flood water resting on the ground or constant supply flowing freely from a tank either by itself or by being lifted by manual or bullock labour. This rice is of such superior quality that one crop of it is usually equal in value to two crops of ordinary grain.

10. It would appear that this fact weighed much too heavily in the balance when the Superintendent drew up his scale for the water classification of these villages. The crop is fully of the value it is represented, but to get that crop a certain constant and plentiful supply of water is a sine qua nom.
11. The Settlement Officer always urged this, and argued that a sweet well, certain, notwithstanding the cost of raising the water, was as good as, if not better than, the Khári River with all its advantages and uncertainty.
12. Now the water annas for a rice field in a lat class position receiving its water from a sweet well were 16 and from the Khári River 24.
13. When I went out with you to test the classification I found fields in the position shown by my blue line classed at 24 annas for water just the same as fields shown by my red line. The classers accounted for this by saying : "This field can get baitha pani and does get it." To a certain extent this was true, but it will be at once apparent that the real water value of the two fields is widely different. In the very worst seasons the fields on the level of the red line will get baitha páni for a first crop and in some cases sufficient for a second crop by lifting with a jilu. But what is the position of the fields on the blue line, if the fall of rain is scanty? It is this : probably for a few days when the flood is down the water does get to that high level; for the whole remainder of the rice season the water may have to be lifted once, twice, or even three times before it' reaches that level, as shown in the diagram, and this for a first crop. I need scarcely say it can never get a second.

a.-first lift.
b.- Becond do. c.-third do.
14. It is evident, then, that full provision should have been made for this in the scale, which was not the case, and the consequence was that the people were most dissatisfied, and very justly, with the settlement which resulted from this classification. The water scale was divided into three classes only, namely :-

| 24 annas | $\ldots$ | $\ldots$ | $\ldots$ | 1 1st class. |
| :---: | :---: | :---: | :---: | :---: |
| ${ }^{16}$ | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| 8 | $\ldots$ | 2nd |  |  |
|  | $\ldots$ | $\ldots$ | $\ldots$ | 3rd |

15. This scale was far too rigid for the delicate classification of the Khari villages, and the drop from 24 annas to 16 per saltum was far too great and too sudden for the many conditions and varations of position with which the classer had in practice to deal.
16. After careful consideration the scale was re-cast, and every variety of position, every possible contingency of supply, distance from the seurce, difference of level, and every other possible advantage or disadvantage was allowed for.
17. I myself proceeded with the classers into Jetalpur, and introduced the new scale, and remained till I was satisfied that they all thoroughly anderstood its application.
18. Just at this time Mr. Bulkley, who, it was intended, should have charge

Superintendent to Collector of Ahmedabad, No.181, dated 3rd May 1860, and toRevenue Cornmissioner, N. D., No. $185^{\circ}$ of 4th May 1860 . of this establishment, was compelled to leave Gujarát for the benefit-of his health, and the duty of testing and superintending these classers devolved on Mr. Beyt, whose establishment in Parantíj I took charge of as a temporary arrangemeut.
19. Mr. Beyts carried on his work in Jetalpur with great zeal and attention, and satisfied himself by constant test not only that the work was being well done, but that the scale as re-cast was exactly what was required. As all detail will be reviewed in the progress report of this Department now in course of preparation, I will proceed to notice the cost of revision of the water classification of these 14 villages and the financial results of the operation.

20. The total number of fields reclassified of the 14 villages noted in the margin was 6,759 , the arable area of which was 11,276 acres, the entire cost of which amounted to Rs. 2,968-14-6, which gives a cost of annas 9-1.44 per field and annas 3-0.80 per acre.
21. The result of the new classification as compared with the old when applied to the late Settlement Officer's proposed rates is given in the following statement of the assessment of Government and alienated land for the year of the introduction of the new, rates into Jetalpur $\frac{\text { sampat } 1096}{4.0 .1886 .50}$ and the present year Rampat 1917 :-
T. D. 1800-61 :-

22. These figures show that the new classification has reduced the rental on the rice under the Khari River about 11 per cent., and raised the rental of the bágáit about 13 per cent.
23. The result is, I think, most satisfactory and as nearly as possible what you estimated it should be. While the new patasthal scale has equalised the classification of the rice under the river by maintaining a correct relative value between fields of different positions, the shiding motasthal scale has slightly raised the rice under wells by making the anna value fluctuate between 16 and 20 annas accordingato the quantity of rice actually under the well, instead of maintaining a constant value of 16 annas, regardless of the area of rice dependent upon the well in case of failure of the monsoon.
24. On the 8rd and 4th December last Mr. Pedder and myself met Mr. Propert in the Jetalpur district, and fully explained to the rayats of the 14 villages, above referred to, the effect the new classification had on their respective rentals. The result was most satisfactory, and no fields were thrown up.
25. After the completion of the Khári villages I proceeded to test the

Maluj.
Hirápur.
Harniar. bagiait classification of the villages of Jetalpur noted in the margin, which you found specially untrustworthy. In all these villages I found the entries in

Nándej.
Biraj.
Undrel.
Dhámatván.
the remark books of the classers, in the bágdit talihtás, and in the rice-classing books faulty. © In many the entries respecting the same well were different in the different books, and in many cases the quality of the water was wrongly described. But in several other villages I tested, one or two with you, I remember the entries were correct and the classification good.
26. I should have commenced

Superintendent, Revenue Survey, Gujarat, to Collector of Ahmedabad, No. 181 of 3rd May 1860.

Superintendent, Revenue Sarvey, Gujarát, to Revenue Commissioner, N. D., No. 185 of 4th May 1860.
Superintendent, Revenue Survey, to Revenue Commissioner, N. D., No. 187 of 8th May 1860.
these 7 villages at once had not the revision of the entire pargana of Daskroi been thrown on my hands, the circumstances connected with which have been fully reported to superior authority in the correspondence marginally noted.
27. On the 1st November last all the classing establishments met at Kaira for what we technically call the phirki, which is a working meeting of all the assistants and classers under the Superintendent, for the purpose of securing uniformity of standard. Immediately on the completion of this duty Mr. Harrington Bulkley and the C Establishment were despatched into Jetalpur to go on with the revision of that pargana.
28. As before stated, the classification of some of the villages I tested proved to be correct, and I, therefore, instructed Mr. Bulkley to take another extensive test to see how far it would be necessary to revise the classification. Mr. Bulkley having done this, replied that he "is clearly of opinion that the water classification scale laid down in the old rules does not assimilate with our present standard," which latter he considers as near perfect as can be, and recommends the entire re-classification of water in all the remaining villages of Jetalpur.
29. As you are acquainted with the principle upon which my new scales

Reported to the Revenue Commissioner, N. D., in my letter No. 187 of 8th May 1860, paragraph 21.
have been drawn up, and as in practice they work very well, it is unnecessary that I should take up your time or that of superior authority by giving them at length.
30. As, however, the bágáit takhtás of all the remaining villages of Jetalpur had to be revised, it is necessary that $I$ should give a copy of the rules that $I$ issued on the subject of haks in wells, which notwithstanding, numerous orders the classers did not seem to understand.
31. You will observe that these rules are very simple and easy to understand. This is tery necessary, as the classers are far too apt to take upon themselves the determination of certain intricate haks which should be determined by the settling officer alone at the time he is fixing the bágaít assessment. All the classers have to do in such cases is to enter clear particulars in their takhta and shera books.
32. The general rules for determining haks are as follows. All cases not met with in these are to be noted by the Assistants for the decision of the Superintendent before the settlement:-


[^8]
## Alienated Well Water.

| Rule VI Bin hak |  | Government rice numbers deriving water from an alienated well, (for which the occupant or cultivator of the land has to pay or make a private arrangement), should be classed bin hak. |
| :---: | :---: | :---: |
| $\underset{\text { Bin hak }}{\text { VII }}$ | $\ldots$ | Alienated land watered from a Government well, and which only obtains water from that well by purchase or favour, should be classed as bin hak. |
| $\underset{\text { Hak }}{\text { VIII }} \ldots$ | ... ... | Alienated land watered from a Government well, (the proprietor or occupier of which land has a right in the Government well), must be classed as receiving its supply by hak, and will pay a piava accordingly. |
| Rule IX | $\cdots$ | Care must, of course, be taken that the classers enter full particulars of all water supplied by wells both in their prut books and bágáit talchtás, which will enable the,settling officer to compare the quantity of land supposed to be watered by right with the quantity estimated according to the capabilities of the wells. |

33. Ever since my arrival I have advocated the measurement of rice shares by the professional department of the survey as prevails in the Konkan surveys. I brought this particularly to the notice of the Revenue Commissioner, N. D., in my letter No. 187 of 8 th May 1860, and in the 5 th and following paragraphs of that letter showed that numerous mistakes must have occurred in Jetalpur on account of this plan not having been adopted. The Revenue Commissioner has now sanctioned this plan of rice measurement in Gujarát, but of course it is too late to apply it to Jetalpur now.
34. I have, therefore, directed the classers in Jetalpur to divide their class sketches of survey numbers as nearly according to the shares shown in the phaisal patraks as possible, by which means the relative value of each share will be recorded nearly as well as if a $p \delta \delta$ measurement had been made.
35. 'The result of the revision of the entire pargana cannot be known until the new registers and ákarbands have been prepared, and the classification applied to the rates. This cannot be done until after the next monsoon, during which the registers, \&c., will be prepared.
36. In my letter No. 424, dated 12th October, I submitted a report to the Revenue Commissioner, N. D., pointing out the diffioulties of making a correct badaít settlement in Gujarát according to the present system, and showed how, under its working, change of occupancy in land must eventually cause considerable confusion.
37. This report recommended the direct taxation of wells on "a system which would prevent an evasion of the tax.
38. The Revenue Commissioner in his reply No. 2563 of 1860 rejects the proposal as illegal, and condemns my plan advocating the taxation of water per se.
39. If land and water always went together in Gujarat, there would be no difficulty in fixing a water assessment on the former, which would hold good for the whole term of the thirty years' lease. But now, whenever a change of occupancy involving the separation of "water right" from the land occurs, the incoming tenant mast petition to be relieved of the water tax, which, I am respectfully of opinion, is a proof that water is in reality taxed per se, although we do, not profess to do it.
40. Now, strictly according to survey rules, this field being recorded as chágoít and taxed as such, should not be let for less than the full survey assessment, and by letting it to the incoming tenant as above described and in thus departing from the survey rules we tacitly admit the taxation of water per se.

- 41. But it appears to me that it is simply impossible to work the present system fairly or equitably for any length of time in cases of changes of occupancy.

42. If we remit the water essessment to an incoming tenant not having a right to the water in the well, we depart from the survey* rules by taking less than the full fixed assessment of the field.
43. If, on the other hand, we say to the outgoing tenant, "if you give up your land you must give up your share of water too," we to all intents and purposes confiscate (what superior authority has designated) private property, and the Civil Courts might not uphold us in so doing.
44. The plan of bagait kasar obtaining in the Deccan seems equally applicable (with some modifications) to Gujarat, and the Revenue Commissioner has called our attention to it, and I am of opinion that before commencing the bágait settlement in another collectorate it is desirable that we should give that plan our very careful consideration.

I have, \&c.,

> C. J, PRESCOTT, Superintendent.

No. 9 or 1861.

## From

## Captan C. J. PRESCOTT,

Superintendent, Revenue Survey, Gujarát ;

## To

> S. MANSFIELD, Esquinz, Revenue Commissioner, N. D.

> Camp Ahmedahad District, 9th April 1861.

Sir,
I have the honour of submitting for your consideration a report by Mr. Pedder, Assistant Settlement Officer, on a proposed change in the mode of assessing bágaft lands in this province, which was a subject of conversation between yourself and that gentleman.
2. I most fully concur with all Mr. Pedder's remarks, and beg respectfully to recommend the plan he proposes to your favourable consideration.

I have, \&c.,
C. J. PRESCOTT, Captain,

Supérintendent, Revenue Survey, Gujarát.

## Froy

S. MANSFIELD, Esquire,

Revenue Commissioner, N. D.;
To
Captar C. J. PRescott,
Superintendent, Revenue Survey, Gujarát.
Six,
I have the honour to acknowledge the receipt of your letter No. 9 of 9th instant, forwarding letter No. 8 of the same date from Mr. Pedder regarding the principles on which the settlement of irrigated lands should be made in future, and request you will be guided by the same if you find by experience no objection to them in practice.
2. In all cases hereafter the bagaít and jirdít assessment should.be shown separately in the survey records, and the bágáit rate or kasar fixed, with as few exceptions as practicable, on the field in which the well is situated,
and leviable from the cultivator who has the largest share in the well. In the survey records and in the jamábandi papers of the first year of the survey settlement the names of the different sharers in the well, together with the sum due by each, should be mentiohed; afterwards, the name only of the largest sharer who should be made responsible for the whole of the bágait casar, should be entered.
3. The proprietary right of Government to Government land confers a right on Government to levy a bágaít assessment on land irrigable by a well dug in it and also the right to interfere if the realisation of that assessment is endangered by the occupant of that well throwing up the land without resigning his right to the water of the well. You should therefore inform the villagers at the jamábandi that no one will be allowed to resign the one without the other ; and where the right to water has been retained, and the land resigned, the bagaít rate will be fixed on the land in which the well is situated, and realized, if necessary, by the sale of the well.
4. I quite approve of the principles laid down in paragraphs 14 to 17 for the assessment of bhutha lands and land irrigated by dhekudis.
5. You should furnish the Collectors with copies-of this correspondence.

I have, \&o.,<br>S. MANSFIELD,<br>.Revenue Commissioner, N. D.

Ahmedabad, 11th April 1861.

No. 8 of 1861.
From
W. G. PEDDER, Esquire,

Assistant Settlement Officer ;
To
Captann C. J. PRescott,
Superintendent of Survey.
Camp Nagina, 9th April 1861.
Sir,
With reference to a conversation which I have had with the Revenue Commissioner, N. D. on the subject of bagait assessment I have the honour of submitting, for transmission to that gentleman with any remarks which you may think fit to offer upon it, the following report, containing a sketch of the principles by which, I am of opinion, we should be governed in making'the settlement of irrigated lands, and which will, I think, be generally approved of by Mr. Mansfield.
2. The first principle, and the only one of universal application, is that, in the case of all lands irrigated from permanent wells, the dry-crop assessment of the land, calculated on the classers' annas, should be kept distinct from the increase leviable on account of the capability of irrigation, and that these two items of revenue should be shown in separate columns of the akdrband-the first as the dry-crop assessment of the field, the second as a bagdit kasar upon it.
3. The adoption of this principle is desirable for several reasons, the chief ones being, first, that it will render much more easy and satisfactory the original settlement, and secondly, that it will facilitate the future administration of a surveyed district.
4. First, you know how often, during the survey jamábandi, it is found that, by the mistake either of the classer or of the settling officer, the bagait rates fixed on the lands under any particular well are unsuitable. It then becomes necessary to'alter the entries in every paper at a great loss of time, while the amount of a bagait kasar could be changed on the spot and the entries corrected by a karkún in five minutes. The amount of labour saved in
the preparation of the papers will also be very considerable, as the settling officer, instead of having to decide on the assessment of every share of land under each well separately, will only be required to fix the amount of the kasar of the well.
5. Secondly, you are aware how liable wells in Gujarat are to fall in, dry up, or become salt. In such cases there can, I think, be no doubt but that, unless Government is prepared to make a new well, the jirait rates only of the lands under the well should be charged. In fact, if this is not done, the lands will be thrown out of cultivation. Under the present system the Collector can only do this by re-calculating the jirát rates of the garden lands from the classers' annas in the registers, and then altering the assessment of the fields in every paper,- a very troublesome operation. If the plan of a bágaíu kasar is adopted, the Collector need only issue an order to strike the kasar out, and only collect the dry-crop assessment already recorded.
6. Beyond this I do not think it is possible to lay down any rule of universal application ; we must be guided by the varying circumstances of different districts or villages. The method in which I would propose to deal with the cases which, so far as my experience goes, are of most frequent occurrence, is as follows:-

1st.-When there is only one irrigated number under a well, both well and land belonging to the same person. In this case there can be no dificulty. The dry-crop assessment and the biydit kasar will be separately entered in the úlcarband, and the total will be the amount entered in the botkhat, khátávahi, \&c., as the assessment of the field.
2nd.-When there is only one number under the well, but more than óne sharer, the shares in, the well being defined. The entries in the ákárband should be the same as above, and the sharers should be required to divide the bagát kasar among themselves. If they cannot agree, the bágait kasar should be divided according to the shares in the well, which should be, as now, ascertained and recorded in the bagäit takhta.
"Example.

Number.
100
Bagast Kasar.
$\mathrm{Rs}_{4}$
12

Amount of each sharer's kaser. well.
$\frac{9}{4}$

Rs.
6
6
3
3

3rd.- When there are several numbers under the well belonging to one person who has the entire right in the well. In this case I think that the share of each number in the well should be defined, and a corresponding portion of the bagait kasar entered against each field in the äkarband.

| Exaniple. |  |  |  |
| :---: | :---: | :---: | :---: |
| Nos. | Jirait Aseesament. Rs. | Share of each Number in the well now defined. | Baguit Xamar of each Number. Rs. |
| 10 | 5 | 1 | 6 |
| 11 | 3 | 4 | 3 |
| 12 | 2 | 4 | 3 |

I recommend this, in order that if, at any time, the holder should throw up one number there may be no dispute about the share of water to which the person who may take up the relinquished number shall be entitled. But I think that the rayat should have the option of retaining that number only in which the well is situated, and paying the entire baigdit kasar ; and we may find it more convenient, as it certainly will be simpler, to fix the whole of the kasar upon the number in which the well is.

4th.-When there are several irrigated numbers under a well, but no rights in the well itself. (This is the case generally in some districts, and when the wells have not been constructed by the rayats themselves).

In this case the share of each number in the well should be fixed, and a corresponding share of the kasar entered against it in the dkdrband, as in the last example.

5th.-When there are several sharers in the well and several irrigated numbers, each sharer holding one distinct number.
In this case a proportion of the bdgdit kasar should be fixed in the akdrband on each number, according to the share in the well.

6th.-When there are several irrigated numbers and several shares in the well, but the numbers do not correspond with the shares in the well.
In this case the entire kasar should be entered in the akarband, opposite the number which contains the well, and the sharers required to divide the amount among themselves. Should they not be able to agree, the kasar to be divided according to the shares in the well, as in the first example.
(In districts not yet measured this case will be of rare occurrence, as we shall no longer find it necessary to have a different standard of size for dry-crop and irrigated fields. One large number, including all the land usually irrigated, will be measured, instead of several very small ones, and a great deal of labour and expense thus saved in the measuring and classing departments.)

> 7th. -It occasionally happens that a well is situated in a barren (khard́ba) number or within the village site.

In such cases the lasar should be thrown on the irrigated numbers' in proportion to the shares in the well, or as the case may be.
7. "The above principles should, I think, be applied to rice lands as well as to garden lands. The assessment of each rice number will include the soil and the ákdishya rating, and to this will be added the bagád kasar.

This will obviate the negessity of cutting up rice lands into such very small numbers as are now found requisitg in districts where there are many wells in rice land.
8. If the above principles of bagáit assessment are approved, it remains to consider in what manner the amount of bágdit kabar on the lands under each well should be fixed.
9. I am respectfully of opinion that this will best be done by fixing a maximum kasar for a well of one kos for each village.
10. This maximum should be determined by a consideration of the distance of the village from market, of its class (according to dry-crop rates), of the kind of garden crops usually grown in the village, and perhaps of some other particulars which further experience will teach us.
11. The amount of kasar to be imposed upon the lands under a one kos well of which (1st) the water is at a moderate depth, (2nd) abundant and unfailing, (3rd) of good quality, (4th) which is near the village, (5th) under which there is sufficient irrigable land to admit of a rotation of wet and dry crops, and (6th) the land under which is rated tolerably high, (say, above 12 annas) having been determined, it will, I think, be easy to deduce the rates to be imposed on wells inferior in any of these particulars. With regard to the 6th of these points, the value of the soil, any difference in the classification of numbers under the same well will, I think, be sufficiently allowed for by the difference in the dryerop assessment.
12. In districts already classified we shall, I hope, be able to make a satisfactury settlement on the above principles from the information already obtained. But for the future it will be advisable to alter the form of the bagiit takhtá which may be greatly shortened and simplified, while it should contain some information which it does not now afford, especially with regard to the kind and quantity of the crops which have during the past eight or ten years been actually grown under each well. It will also probably be requisite to modify considerably the rules at present in force for the measurement and classification of rice and bogiat lands. But these are matters of detail with which it is unnecessary to trouble the Revenue Commissioner, and on which, I would suggest, the opinions of the classing assistants should be taken during the ensuing rains.
13. There are two other points which I may be permitted to notice-irrigation from kutcha wells and from dhekudis.
14. Kubcha wells are merely holes dug at a trifling expense every year, and the lands irrigated by them are now taxed by, in addition to the dry-crop assessment, a rate upon the water-bag. This system, though I think objectionable, it may in some cases be impossible to get rid of. But the lands in which kutcha wells are most commonly made are bhatha lands on the banks of rivers in which abundant water can always be obtained by digging to a depth of from 4 to 10 feet. In such lands pucka wells can be constructed for from 30 to 50 rupees, but do not usually last many years. Garden crops, with only a rotation of dry crops, are always grown, but whether from kutcha or pucka wells appears to depend on the cultivator's judgment whether it is more profitable to build a brick or kundel well for 30 or 40 rupees which will last ten or fifteen years, or to spend 5 or 6 rupees annually on digging a hole and erecting the framework for a water-bag.
15. The effect of the present mode of settlement in lands of this kind is that, if a man has a pucka well in his field at the time of settlement, he is charged full bagait rates. If he has not, but is in the habit of irrigating it from lculcha wells, he is charged an equivalent by a rate on the kos whenever he uses it. While, if he builds a pucka well immediately after the settlement at an expense only equivalent to the yearly cost of a kutcha well, he is taxed at a rate wholly inadequate to the value of his land.
16. Pucka dhekudis are merely brick wells built in the bank of a river, and may be treated in the same way as other wells. A kutcha dhokudi is a framework annually erected over the perpendicular bank of a river by which the water is lifted, and lands irrigated in this way are taxed by a rate on the water-bag when used.
17. In both these cases, of lands close to rivers irrigated by kutcha dhekudis and of bhatha lands irrigated by kutcha wells, I am respectfully of opinion that the lands should be assessed at moderate bágait rates, without reference to the existence of the means of irrigation or to their being actually in use. A rate on the water-bag when used is really an extra cess on irrigated crops, and is open to the same objections as crop rates. The power of always obtaining water is an element in the capabilities of the land, and as we permanently assess at higher rates (whether, as now, by a separate bagait rate, or, as I advocate, by a bagait kasar) lands in which a permanent well exists, whether the cultivator chooses to irrigate it or not, so I do not see why a man, whose field is naturally so situated that he can always raise garden crops in rotation, should be assessed only at dry-crop rates, because he does not choose to avail himself of the natural capabilities of his land.
18. You will,'I think, agree with me that there will be no difficulty in obtaining sufficiently accurate information to enable us to assess such lands at permanent bagait rates, and I beg to recommend that this system be adopted in districts or villages where it may appear to be expedient. In cases where it is possible that a river may change its course so as no longer to render irrigation by kutcha dhekudis practicable, it may be advisable to assess the land by a bdgdit kasar in addition to the dry-crop assessment, as in the case of permanent wells.
19. In conclusion, I beg to enumerate the advantages of the system of bágdit assessment now proposed :

1st.-Much labour and expense will be saved in the measuring department by avoiding the necessity of cutting up garden lands and rice lands irrigated by wells into very small numbers.

2nd.-The classification of garden and rice lands will be simpler, less costly, and more accurate.

3rd.-Much labour, time, and expense will be saved in making the settlement, as the settling officer will only have to decide on the amount of the kasar for each well, instead of on the rate for each irrigated number, and the necessary papers will also be simpler.

4th.-There will be less risk of error in fixing the assessment of irrigated lands; and if during the survey jamabandi a mistake is found to have been made, it can be corrected with less trouble and loss of time.

6th.-It will be easier to explain to the rayats than future payments.
6th.-The future administration of surveyed districts will be facilitated.
7th.-In reporting upon the introduction of the survey system into a district it will be'possible to show the exact amount of revenue derived from * irrigation in addition to the dry-crop assessment, which cannot now be done.

I have, \&c.,
W. G. PEDDER.

No. 27 or 1862.
Frox
W. G. PEDDER,

Survey Settlement Officer;
To
T. C. HOPE, Esquire,

Acting Collector of Ahmedabad.


Surat, 16 th October 1868.
Sir,
I have the honour to submit the jamábandi report of the Jetalpur Pargana of your collectorate for the year Samvat 1917, A. D. 1861-62.
2. You are aware that the survey settlement was originally introduced into the pargana by Mr. Rogers in the year A.D. 1851-59, but that gentleman was so much dissatisfied with the classification of rice and garden lands that it was determined to re-classify them (vide correspondence marginally

Resolution of Government; No. 3971 of 1859, forwarded with Revenue Commissioner's endorsement No. 1996, dated 7 th October 1859. Superintendent's letter to the Revenue Commissioner, No. 185 of 4th May 1860, and accompaniment. Saparintendent's letter to Revenue Commispioner, No. 483 of December 16th, 1861. noted). Accordingly the rates in the 14 villages watered from the Khári River were revised in accordance with the new classification in 1860-61, and those in the remaining 43 villages during last season. This report ought, therefore, to be properly confined to the effect of the revision upon the rates of the 43 villages marginally noted, and

1. Chosar.
2. Hathiján.
3. Od.
4. Sahijpar.
5. Jetalpar.
6. Nandej.
7. Kamod.
8. Navápara (Dholka).
9. Wasai.
10. Asláli.
11. Gámdi.
12. Undrel.
13. Bhavál.
14. Derdi.
15. Lámbha.
16. Lakhmipura.
17. Rarka.
18. Rohisa.
19. Jinjhur.
20. Naj.
21. Istolabad.
22. Bázrol.
23. Navápura (Daskroi).

24, Bárejdi.
25. Kanej
26. Lasii.
27. Hirapar.
28. Chitrisar.
29. Harniév.
90. Badodra،
31. Tájpur.
32. Biraj.
33. Girámtha.
34. Mahijds.
35. Kaloli.
36. Kásandra.
37. Mahij.
38. Timblia.
39. Dhámatván.
40. Páldi
41. Báreja.
42. Miroli.
43. Visalpur.

Mr. Norman, the Second Assistant Collector, should have made the jamabandi in the remaining or Khári villages. But as I, being on the spot, could make the jamábandi of these villages also with little additional trouble, and as this was a relief to Mr. Norman, who was at that time much occupied, it was arranged that I should do the whole of the work, and hence I sub-. mit the report instead of him. The jamábándi, was begun March 28th and completed June 21st.
3. The pargana of Jetalpur consists of 62 villages and 10 hamlets; 5 villages alienated, and 57 villages and 10 hamlets Government. No change in the number has taken place during the year under report.
4. The season of 1861-62 was very unfavourable, particularly to rice crops, owing to a deficiency of rain in August and September.
5. Effect of the Revision.-The accompanying statement No. 1 shows the details of area and assessment according to the revised classification contrasted with those according to the original classification. This statement requires a little explanation-
(a) The increase in the total number of survey fields and in the total arable area, columns 4 and 7, is caused by large unassessed fields, particularly in bhátha lands in the beds of rivers, having been cut up and assessed during the revision.
(b) The increase (acres 292-35) in the arable area of Government lands as compared with alienated lands, is caused by alienated lands found to be held in excess' of the recorded area having been resigned by their owners and entered as Government.
(c) You will see that the total assessment of the 14 Khari villages according to the first classification was Rs. 1,10,033-8-0, and according to the revised classification is Rs. 99,986-8.0, showing a decrease of Rs. 10,047-0-0 The cause of this decrease has already been explained to be (vide corre-

Appendix to Superintendent's letter to Revenue Commissioner, N. D., No. 483 of 16th December 1861. spondence marginally noted) the reduction of the water classification in the rice lands irrigated from the Khári, which has lowered the assessment of those lands from Rs. $95,958-12-0$ to Rs. 85,700 . In the remaining 43 villages of the pargana the total assessment according to the first classification was Rs. 2,56,026-12-0 and according to the revised classification is Rs. 2,66,270-8-0-an increase of Rs. 10,243-12-0 The assessment of dry-crop lands has been raised from Rs. 97,546-2 to Rs. 98,897-10-0-an increase of Rs, 1,351-8-0. The cause of this increase, the classification of dry-crop lands not having been revised, is owing partly to the cutting up large unassessed numbers and partly to lands originally classed as garden having now been entered as dry-crop, the wells being found to be out of repair. The original assessment of garden lands being Rs. $20,244 \cdot 10-0$ has been reduced to Rs. 19,990-12.0-a decrease of Rs. 253-14-0. This is owing partly to wells having fallen in, partly to some wells having been erroneously classed as sweet when they were salt or brackish, and partly to land which had no right to water having been wrongly classed as irrigated from certain wells. Rice lands were originally assessed at Rs. 1,38,236, which has been raised to Rs. 1,47,382-2-0-an increase of Rs. $9,146-2$. This increase is caused by the operation of the new scalefor the classification of rice lands repoted in Captain Prescott's letter marginally noted.

Superintendent to Revenue Commissioner, No. 187, dated 8th May 1860, paras. 15 to 22.
(d) The total assessment of the pargana according to the original classification was Rs. $3,66,060-4$ and according to the revised classification Rs. 3,66,257-an apparent increase of Rs.196-12-0. But as the area of arable land has been enlarged by the cutting up of unassessed numbers, the real effect of the re-classification has been a slight decrease in the assessment of the whole pargana. This decrease, however, falls on the assessment of alienated lands, and there is an increase of Rs. 848 in the assessment of Government lands. You will thus see, that, as was anticipated, the decrease in the assessment of the 14 Khari villages caused by the revision of classification has been as nearly as possible balanced by an increase in the assessment of the rest of the district. Mr. Rogers, in reparting on the revision of assesssment in Jetalpur (to the Collector of Ahmedabad, No. 137 of 1859, paragraph 34) estimated that the total assessment of all the Government lands of the pargana, according to the rates he proposed, would be Rs. 2,00,175. You will see that the total assessment of Government lands is Rs. 2,18,062-12, or Rs. 17,887-12 above the estimate.
(e) The average rate of assessment in Jetalpur is, for dry-crop land Rs. 1-12-7 per acre, for garden land Rs. 5-5-8, and for rice land Rs. 6-12-3, The average size of fields is acres $2 \frac{15}{4}$, and the average assessment of each field Rs, 7-14-0,

## $138-29$

6. State of Revenue and Cultivation-Government lands.-Table No. II gives the details of revenue and cultivation for last season, compared with those for Samvat 1917, A.D. 1860-61. I have drawn up this statement so as to show, for the 43 villages revised last season, the increase and decrease of revenue and cultivation according both to the first and the revised classification, and the difference between the two, and hope that it will be found intelligible.
7. The number of Government arable fields in the district is 29,495 , containing 64,860超 acres, and assessed at Rs. 2,18,062-12. From the latter item must be deducted Rs. 931-15-8, a portion Rs. 272-12 on account of rice and garden lands irrigated by wells lately built, and for which leases have been granted under Rule I of Revenue Commissioner N. D.'s circular No. 1003, dated 6th August 1844, and the rest Rs. 659-3-8 of lands entered as Government, but which the owners hold free or at reduced rates during the lives of certain persons or pending enquiry. This leaves a net realisable assessment of Rs. 2,17,130-12-4. Of the above, in Samvat 1917, A.D. 1860-61, 8,331 fields containing $21,427 \frac{5}{60}$ acres and assessed at Rs. 57,736-4 were waste, and 21,164 fields containing acres $43,433 \frac{3}{4} \frac{3}{0}$ and assessed according to the revised classification at R. $1,59,394-8-4$ were in cultivation. Of the latter area 1,683 fields containing 4,116 $\frac{31}{41}$ acres and assessed at Rs. 11,661-12 were thrown up by the occupants at the close of the season, and consequently 19,481 fields containing $39,316 \frac{20}{6}$ acres and assessed at Rs. 1,47,732-12-4 remained in cultivation at the beginning of the season under report. To this must be added the fields newly taken up, in number 3,551, containing 8,289 ${ }^{3} \mathrm{a}$ acres, assessed at Rs. 26,202-12. There were thus cultivated in the season under report 23,032 fields, containing 47,6052 25 acres assessed at Rs. 1,73,935-8-4 in the spason 1861-62-a net increase on the area cultivated in 1860-61 of 1,868 fields containing 4,172 $\frac{19}{60}$ acres assessed at Rs. 14,541-0. This increase is entipely due to increased cultivation. Calculating also the increase due to the revision of classification in 43 villages you will see that the whole increase in 1861-62 over the revenue of cultivated Government lands in 1860-61 is Rs. 21,070-8. Cultivation hes increased in every village except one, Lámbha, in which there is a decrease of acres $7 \frac{1}{80}$ assessed at Rs. 15-8-0.
8. The Government fields which remained waste in the season under report are in number 6,463, containing 17,254 $\frac{31}{40}$ acres, assessed at Rs. 43,195-4-0. Of this land a considerable portion (acres 1,894944) is contained in the bids or meadow lands at Kunij, Girámtha and Lambha, the grass of which is annually sold, and produced in the season under report Rs. 2,233-0-8; and in it are also included arable lands set apart for the use of the villagers as stack yards, places for the cattle to stand on, \&c. The greater portion of the remaining arable waste will, I anticipate, be brought into cultivation during the present season.
9. Remissions.-The remissions granted on account of Government lands for the season under report amount to Rs. 13,388-9-6. Of this amount Rs. 8,116-4 are nominal, caused by the revision, those cultivators the amount of whose holdings were increased by the revision being charged only the sums due according to the first classification. The remainder, Rs. 5,272-5-6, is on account of the failure of rice crops, and this item demands some explanation.
10. You are aware that the mode of assessing rice lands adopted by Major Wingate and Mr. Rogers for your collectorate was that of assessing the soil of such lands-first at dry-crop rates, and of then adding a water assessment, usually much heavier than the soil rate ; and the people were informed that in years in which, owing to the failure of rajn, a rice crop could not be raised, the water assessment would be remitted, and that on the soil alone levied (vide Mr . Rogers' report on the settlement of Dholka to the Collector of Ahmedabad, No. 137 of 1854, paragraph 32 ; and that on the settlement of Viramgám, No. 119 of 1857, paragraph 17).
11. The fall of rain in the monsoon of 1861 was deficient and particularly unfavourable to rice. There was a heavy fall in July, which enabled the cultivators to transplant the rice successfully, but the rain after that month was very scanty, there was scarcely any in September, and there was no second flood in the Kbari River, which is absolutely necessary to save the superior kinds of rice
grown in the heavily assessed villages watered from that river. Consequently the rice suffered severely, the crops were much below the average, and many fields were entirely lost in nearly every village in the district; but the Khári villages suffered most, both because nearly all the lands in them are rice, because they have very few wells depending for their water-supply on the river, and because the superior kinds of rice which they produced, pankhali and kumode, do not ripen until November, and consequently suffer more from the failure of the latter rains than the inferior sorts which ripen earlier. Mr. Norman, Second Assistant Collector, carefully examined these villages, at the end of October, and handed over to me the notes which he then took. From them I find that in Navagam, (in which the maximum assessment of rice lands is Rs. 12-8 per acre), out of 44 fields taken at random there was an average crop in 1 only; crops estimated at from $\frac{1}{3}$ to $\frac{8}{4}$ of the average in 4 ; no crop at all in 31 ; and in the remaining 8 , crops less than $\frac{1}{3}$ the average. Of 45 fields examined in Mulharpura there was in $2 \frac{1}{3}$ of an average crop, in 35 no crop at all, and in the rest less than $\frac{1}{3}$ of a fair crop. Other villages were nearly as bad.
12. The Gujarati rules issued by Mr. Rogers lay down that where rice cultivation is not made ( $દ$ iग̉नl वावेतर 1 थाね), owing to a deficiency of rain, in more than $\frac{2}{3}$ of the rice land watered from the same source or situated in the same place, remission of the water assessment will be given on the whole of the land. Now, first the cultivators claim that the remission shall be given for every field in 욕 of which a crop is not obtained. This is clearly inadmissible, and is contrary to the wording of the rule. But secondly, the Mamlatdars and clerks, who were with Mr. Rogers, say that that gentleman meant that remissions should be given only when $\frac{2}{3}$ of the land were not planted with rice. This is the meaning of the Gujarati words, and I recollect Mr. Rogers telling me that this was his intention. But this interpretation, in a season like the one under report, is excessively unfair to the cultivator. A man who has not planted bis rice land at all, or who has sowed a dry-crop in it, can afford to pay the full assessment much better than one who has had the expense of preparing and manuring the land and of transplanting the rice, and who has lost the whole crop after all.
13. Under these circumstances and with Captain Prescott's consent 1 determined on setting aside Mr. Rogers' rule altogether, and on giving such remissions as seemed absolutely necessary on a different principle. Government have directed, in accordance with an opinion of Captain Wingate (vide printed Revenue Circular Orders, p. 483,) that in case of an extensive failure of crops an average reduction of assessment is preferable to individual remissions. But this plan would have been, in the case of Jetalpur last season, unfair, and would have caused unnecessary loss to Government. The dry-crops werepretty good, and even in the rice lands those who were lucky enough to have wells, saved the greater portion of their rice, and got a second crop in the cold weather, thus having the benefit of the very high prices which have prevailed.
14. I, therefore, determined on giving individual remissions where they seemed absolutely required; and, except in the case of a few very poor persons, I gave no remissions, except when $\frac{2}{3}$ of the amount of the holding was on account of rice land and when $\frac{2}{7}$ of the rice crop were totally lost. On this principle remissions were given in the following villages:-

| Khiri Villages. |  |  |  |  | Other Villagee. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name. |  | Rs. |  |  | Nawe. |  |  |  | p. |
| Kutvara | $\ldots$ | 76 |  |  | Kamod | ... | 42 | 8 | 0 |
| Kunera |  | 366 | 0 | 0 | Naj | ... | 13 | 0 | 0 |
| Goblej | ... | 6 | 0 | 0 | Chitrasar | $\ldots$ | 33 | 0 | 0 |
| Navágám | ... | 1,571 | 8 | 0 | Jetalpar | ... | 10 | 8 | 0 |
| Naika ... | ... | 542 | 4 | 0 | Devdi | ... | 15 | 0 | 0 |
| Chanidra | ... | 58 | 0 | 0 | Báreja ... |  | 29 | 1 | 6 |
| Duthal... | ... | 92 | 0 | 0 | Mahijra ... | ... | 4 | 0 | 0 |
| Pinglaj... | ... | 396 | 4 | 0 | Mahij ... | ... | 17 | 0 | 0 |
| Pansoli | $\cdots$ | 610 | 12 | 0 | Lakhmipur | $\ldots$ | 88 | 8 | 0 |
| Berai ... | ... | 228 | 12 | 0 | Lambha... |  | 70 | 4 | 0 |
| Mnlharpura | ... | 839 | 0 | 0 | Hathijan | $\ldots$ | 18 | 8 | 0 |
|  |  |  |  |  | Aslali | $\ldots$ | 92 | 8 | 0 |
|  |  |  |  |  | Od | ... | 121 | 0 | 0 |
|  |  | 4.767 | 8 | 0 |  |  | 504 | 13 | 6 |

## 138-81: -

15. The people grumbled a good deal at not getting larger remissions. I think, however, that I gave as much as was absolutely necessary. The people of Aslali were particularly discontented, and have, I believe, petitioned you and the Kevenue Commissioner, N.D., on the subject. In this village the rice crops certainly seem to have been very bad, but every substantial ctiltivator besides his rice has a good deal of dry-crop land, and there are a great many wells which saved some of the rice and gave good second crops. The village, besides, is one of the wealthiest in the pargana. Under these circumstances I refused to give any remissions, except to some of the poorest cultivators belonging to low castes.
16. I trust that the new works of irrigation which have just been constructed in the Khari will save any future remissions in the villages watered by that river, except in years of absolute drought, when no flood comes down the river at all. Had they been made the year before last, so that the first flood might have heen saved and stored in the tanks instead of being suffered to flow away as soon as the fields were watered, I think the whole Rs. 4,767-8 of remissions would have been saved. My reason for saying so is that in 3 villages-Shetra, Dhamri, aud Wadald-the people at their own expense made earthen embankments, brought the flood water into, their tanks, and afterwards saved the whole of their rice from those tanks, so that they alone of the 14 villages did not apply for any, remissions. They asked me for some help to make these embankments better and stronger. Their petitions were referred to Lieutenant Dowden, the Engineer officer who was in charge of the Khári River works, and I hope that something may have been done for them, as they deserve encouragement.
17. In the other rice villages which depend entirely on the rainfall I fear that, in bad seasons, it will always be necessary to give some remissions on account of rice. If, in such bad seasons, the poorer cultivators are pressed too hard, they are driven either to sell their bullocks or to borrow from sávkárs, both having a directly bad effect on the prosperity and revenue of the district in succeeding years. I would, however, with great deference submit for your consideration whether, instead of giving remissions in bad seasons, it would not be better to let one or two instalments stand over until the next harvest. If the next season were favourable, the cultivators could pay the arrears without difficulty ; and, though I know the strong objections against outstanding balances, I think this would be better than either sacrificing revenue on the one hand, or unduly pressing the cultivators on the other. I would respectfully suggest that Mr. Rogers' rule, referred to in paragraph 12, be cancelled, as I think it will cause embarrassment in future seasons.
18. Miscellaneous Items on account of Government Lands.-These, in the year under report, amounted to Rs. 8,821-8.11. The different items are shown at the end of Table No. II.
19. Alienated Lands.-Alienated lands in the 57 khálsa villages of the pargana are the following :-

| Lel ${ }^{\text {a }}$, | A. | g. | Assessment. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rs. ${ }^{\text {a }}$ |  |
| Lands held on tenure of district service | .. 91 | 22 | 530 | 0 |
| Do. held on tenure of village eervice | ...3,444 | 28 | 12,870 | 0 |
| Total service lands | ... 3,586 | 10 | 18,400 | 0 |
| Lands not held on servipe tenure | ...32,238 | 10 | 1,34,794 | 4 |
| Total of aliensted lands | ...35,774 | 20 | 1,48,194 | 4 |

20. Revenue on account of Aliennted Lands.-The items of this amount, Rs. 44,068-6-11, will be found at the end of Table No. II. The report on the commutation of cesses, \&c., on alienated lands I am now preparing, and hope to submit it shortly together with those for the parganas of Daskroi and Parintif. There is one item which calls for some remark, that on account of pidiva or water rate, Rs. 11,479-13. You are aware (vide his letter
to the Collector of Ahmedabad on the revision of assessment in Jetalpur, No. 137 of 1859, paragraph 32) that Mr. Rogers imposed a very heavy water rate amounting to the full water assessment on alienated rice lands irrigated from the Khári River. The Revenue Commissioner, N.D., objected to this, and Government passed, on the correspondence which ensued, a Resolution No. 1123, dated March 8th, 1861, in consequence of which the amount of this water rate is (by Collector's order to Mámlátdár dated 11th February 1860) brought to account, but not collected, pending a decision. I would respectfully submit that it is high time some decision be come to on this subject. The amount outstanding is now very large, and if it is determined to uphold Mr. Rogers' settlement there will be great difficulty in collecting the arrears.
21. Remissions on account of Alienated Lands.-These amount toRs. 140-4-0. Of this sum Rs. 119-4 are merely nominal, being remissions on account of fields paying the full assessment as quit-rent, and the assessment of which has been raised by the revision. Rs. 21-0 were given as remission :of quitrent under the following circumstances. Mr. Rogers settled (by an order which has since been cancelled by Government Resolution No. 4774, dated 21 st December 1859), that when quit-rents, which under the former system depended upon cultivation, were by the survey commuted into permanent quit. rents the owner might avoid any year paying his quit-rent by resigning his field for that year, and that the Mámlatdar should then, if he could, let the field for the survey assessment, pay Government the quit-rent, and hand the balance, deducting a certain percentage, over to the owner. Accordingly, the owners of two or three rice fields, the permanent quit-rents on which were very heavy and considerably exceeded the dry-crop assessment, resigned them for the year, and the Mámlatdar let them at the survey assessment. The crops entirely failed, and the cultivators, poor culies, applied for a remission of the water assessment. As they could not pay, I directed the soil assessment only to be levied, and the difference between that and the full quit-rent to be entered as remission of quit. rent.
22. Comparison between the land revenue for Samvat 1917, A.D. 1860.61 and that for the year under feport:-

23. Increase and Decrease.-The increase Rs. 21,070-8 in the assessment of cultivated Government arable lands has already (paragraph 7) been explained to be due-Rs. 14,541 to increased cultivation and Rs. 6,529-8 to the revision of assessment. In the miscellaneous items the increase Rs. $950-5-5$ is caused by an increase of Rs. 1,955-2-0 in the produce of grass lands, which increase is reduced by a decrease of Rs. 877-7-8 owing to the cutting up of large unassessed bhdtha numbers sold by auction yearly for cultivation and the revenue consequently from which source has consequently diminished from Rs, 2,019-0-8 to Rs. 1,141-9-0. The decrease of Rs. 8,788-11:0 in the revenue on account of alienated land is in the item of water rate, already explained in paragraph 20. In all alienated rice fields watered from the Khari, the crops on which failed, the water rate was of course not brought to account, and conse. quently this item has sunk from Rs. 19,276-14 in A.D. 1860-61 to Rs. 11,479-13 n A D. 1861-62-a decrease of Rs. 7,797-1.
24. Sáyar Revenue.-The sáyar revenue in 1861-62 amounted to Rs. 17,003-13-7 against Rs. 14,276-5-2 in 1860-61. The increase Rs. 2,727-8-5 is principally due to the items of income-tax, Rs. 13,108-7 in 1861-62 against Rs. $11,403-4$ in $1860-61$.

25．The total realisable revenues of the district for 1861－62 as compared with that for 1860－61 are thus as follows ：－


26．Of this there has been collected up to the 31st July 1862 land rev． enue Rs．2，01，293－10－7，sáyar revenue Rs．16，575，leaving outstanding balarices， land revenue Rs．12，003－0－1 and sáyar Rs．427－14．Of the balance of land revenue Rs．10，739－0－0 are on account of water rate on alienated lands，which，I have already explained（paragraph 20），is not collected，pending a decision of Government on the subject；Rs．341－12－5 have not been collected from the farmer of Daroda on account of the quit rent of that village，pending settlement of a claim he has for compensation ；Rs． 236 are due from certain cultivators of Chitrásar and Hathiján who reside in Dholka and Daskroi．The Mámlatdárs of those dis－ tricts have been written to，and the sum has probably been now recovered．The remaining balance Rs．686－3－1 is due in various small sums by different culti－ vators，and will be eventually recovered．Imprisonment was not resorted to in any case to realise the revenue．

27．Survey Boundary－marks．－The following is a table showing the state of the boundary－marks ：－

| Name of Táluka． |  | On Cuitivated Lamd． |  |  |  | On Wastr Land． |  |  |  | Cost or Repair |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | In good condition． |  | Out of repair． |  | In good condition． |  | Out of repair． |  |  |  |  |
|  |  |  | $\begin{aligned} & \text { 8. } \\ & \stackrel{8}{8} \\ & \text {. } \end{aligned}$ |  | $\begin{aligned} & \dot{0} \\ & \stackrel{8}{8} \\ & \text { in } \end{aligned}$ |  | $\begin{aligned} & \dot{⿷} \\ & \text { 啇 } \\ & \text {. } \end{aligned}$ |  | 范 |  |  |  |
| Jetalpur．． | ．． | 168，317 | 1，551 | 209 | 9 | 41，104 | 1，023 | 678 |  | $\begin{array}{ccc}\text { Rs，at } & \text { p．} \\ 115 & \\ 15 & 0\end{array}$ | ．．． | $\begin{gathered} \text { Rs. a. } \\ 1311 \end{gathered}$ |

According to this the proportion of marks out of repair is not large．In riding about the district，however，I noticed that a good many marks were not in good order，especially in rice lands and the light sandy soils，and that many marks on the sides of roads had been injured by carts being driven cearelessly against them．

It is very difficult to keep the earthen marks in the sandy soils in a satis－ factory state，as in the hot weather the wind literally blows away the sand of which they，are made，and in the rice lands，because the water in the rains saps them away：．In the latter case it would，I think，be well to let the cultivators， when they like to do so，substitude＂khunts＂or marks made of brick and chunam for the earthen ones；they would do this，I think，for the sake of the space they would save．In the case of the sandy soils，nothing but continual attention will keep the marks in good order．

28．Village Maps．－The village maps are in bad order，but this is not the fault of the village accountants，as the maps have been much knocked about during the revision of classification．I hope that new maps will soon be issued from the Survey Department；they will，I believe，be printed as soon as the settlement of alienated lands held in excess of the authorised area is finished．
29. Cultivators' Receipt-books.-I examined and compared the receipt-books of a number of cultivators in each village as it came up for jamábandi, and, as a rule, found them correct, and all entries made up to date. In one village, Paldi, I found that payments which had been made and duly credited in the day-book had not been entered in the receipt-books, and the people said that this was the practice of the village accountant. I referred this case to the Huzur Deputy Collector in charge of the district for further enquiry.
30. I found that the pátidárs and Kanbi cultivators almost universally and many of the Rajputs and Kolis knew perfectly well the amount of their holdings and the instalments they had paid, and were well acquainted with the survey system. They all seemed quite aware of the advantage of being able themselves to read the village-books and accounts (which many of them can do), and are, I think, in consequence very desirous of being able to educate their children.
31. General effect of the introduction of the survey system on revenue and cultivation.-During thirty years preceding the introduction of the survey system into Jetalpur the average annual assessment of cultivated Government land was Rs. $1,58,028$, and the average realisations Rs. $1,50,043$. In the year A.D. 1858. 59, in which the survey settlement was introduced, the Government land under cultivation was $33,857 \frac{9}{\omega_{0}}$ acres, assessed under the old system at Rs. 1,56,384-9-10, which sum was reduced by the settlement to Rs. 1,29,789-15, an immediate decrease of Rs. $26,594-10-10$. This year the cultivated area is $47,632 \frac{80}{20}$ acres, assessed at Rs. 1,73,935-8-4. There is thus an increase in the assessment over the thirty years' average realisations of Rs. 23,842-8.4 over the last assessment under the old system, to which must be added Rs. 1,141-9-0 on account of unassessed bhátha lands reckoned in the cultivated area according to the old system, but excluded from it by the survey; while in three years from 1858-59, the year in which the survey settlement was introduced, to 1861-62 cultivation has increased by 13,748 $\frac{18}{40}$ acres and the revenue by Rs. 44,145-9-4.
32. These results will, I trust, be considered satisfactory, and I hope that the usual guarantee for the permanency of the rates may be no larger withheld. As it is, the people were discontented with the revision, and professed, absurdly of course, to consider it a breach of faith. By giving the guarantee now, any confidence they may have lost by the revision in the stability of the rates will be restored.
33. At the same time I consider it right to mention one or two errors into which we have, I think, faller in the assessment of Jetalpur :-

18t. - I think that the dry-cróp rates adopted by Mr. Rogers are proportionately somewhat too low and the rice water rates are too high. The people consider 10 Bengal maunds of bajri and math the fair average produce of an acre of good dry-crop gorádu soil. As these grains are now sold in the Ahmedabad market at about 23 sers the rupee, the value of the produce of an acre is about Rs. 18, and the straw is worth Rs. 2 more; total Rs. 20. The maximum dry-crop rate in most of the Jetalpur villages is Rs. 2-8, at which ratethe assessment would represent the value of $\frac{1}{8}$ of the gross produce. Theaverage produce of an acre of good "akáshya" (not artificially irrigated) rice land is estimated at about 12 Bengal maunds of "sutarsal" rice, which is selling at 19 sers the rupee, or about Rs. 25 the acre, and the straw being worth about Rs. 2 makes the total value of the produce of one acre $=$ Rs. 27. The maximum soil rate for rice land is in most villages Rs. 2-8 and the average maximum water rate in the rice villages is $\mathbf{R s}$. 9 . One-third of the latter rate is generally imposed on good rice lands not artificially irrigated, which makes the total assessment $=$ Rs. $5-8$, or about $\frac{1}{5}$ of the gross produce. But as the cultivation of rice is both more expensive and more precarious than that of dry crops, one would think that the proportion which the assessment bears to the gross produce should be lower instead of higher in the case of the former.

2nd.-The question of the mode of assessing garden lands has already been fully discussed. I need, therefore, only say that the experience of this year confirms me in the belief that the method adopted in Jetalpur is not the best.
srd. -The valuable and extensive "bhatha" or alluvial lands in the bed of the Sábarmati River were assessed on the same principle as other
lands; that is, those which were irrigated from permanent masonry wells were assessed at permanent garden rates, and those which were not, at dry-crop rates, an additional rate on the bag used to lift the water being charged when irrigated crops were raised in them from temporary wells. Now in all these lands there is abundance of water within two or three feet of the surface, and irrigated crops are always raised, except when a dry crop is grown in rotation. A permanent masonry well can be built for Rs. 30 to lis. 60 . which, however, lasts only ten or fifteen years, and a temporary well lasting one season for 5 or 6 rupees. The consequence of the mode of assessment adopted for these lands will be that all those cultivators who now irrigate these fields from temporary wells and pay the rate on the waterbag will build permanent wells, Government will lose the whole amount now produced by the rate on the water-bags, and the lands will pay only dry-crop rates wholly inadequate to their real value. All such lands, I am of opinion, should have been assessed at once at permanent garden rates, and this course it has been determined to adopt in future settlements. A somewhat similar case is that of land irrigated by dhekudis or wells built in the banks of rivers. The village of Káloli consists of a long strip of very fertile land lying along the bank of the Sabarmati and intersected by the Khári. From one or other of these rivers every field in the village can be, and is, occasionally irrigated by means of dhekudis. But as the lands along the rivers and in which the dhekudis are situated are almost entirely alienated, and the cultivators of Government lands cannot use the dhelcudis without the permission of the owners, for which permission they have to pay, it would have caused a heavy loss of revenue had the dhekudis been treated as permanent wells and a certain quantity of land assessed at garden rates fixed under each of them, because the Government lands which have no right to the use of the dhekudis could have been assessed at only dry-crop rates. Yet under the late system all lands, alienated as well as Government, paid, in effect, garden rates when irrigated crops were raised,-the latter by heavy crop rates, the former by "savádias". Mr. Rogers consequently assessed all lands at dry-crop rates, and fixed a water rate on each bag used to lift water. But I am respectfully of opinion that the proper course would have been to assess all lands at permanent garden rates varying with their distance from the source of supply of water, and to commute the "savádias" on alienated lands into permanent quit-rents.

4th.-Lastly, you are aware dry-crop rates of assessment are reduced by the distance of the field from the village. In Jetalpur the reduction only begins at a distance of $1 \frac{1}{2}$ mile, and is then only one anna in the rupee. I am convinced that this distance is too great. The people all say they had rather pay Rs. 5 per acre for a field close to the village, than Re. 1 for an equally good one at a distance of 2 miles. It has been determined, as a general rule in future settlements, to lower the assessment 1 anna in the rupee for every $\frac{1}{2}$ mile of distance from the village. We shall thus be able ta fix a higher maximum rate of assessment without the danger of over-assess-ing the less valuable lands.
34. I forward herewith the rough notes taken of the jamábandi of each village, as you may wish to refer to them ; when done with, please to have them destroyed.

## 1 have, \&c.,

## W. G. PEDDER.

P. S.-I have to apologise for the late period at which this report is submitted.

The delay has been entirely caused by a discrepancy between my figures and those given by the Mámintdár, which was only rectified after numerous references. As it is, there is still a difference of Rs. 217-8 between the figures given by the Mámlatdur as the assessment of cultivated Government lands in $1860-61$ and those which I took off the village "karárbands". This seems to have arisen from a mistake in the way of accounting for money deducted from the assessment on account of leased wells. I do not like to detain the report longer on this account, as I hope the mistake is of no great importance.
W. G. P.

TABLE $I$.
Details of Area and Assessment, Jetalpur Pargana, Ahmedabad Collectorate.

W. G. PEDDER.

TABLE 11.

## Contrasted Jamabandi Statement.

|  |  | First Clasaification. |  |  | Reviegd Clabsitication. |  |  | ingrase caugri by the Revision of Classificatios. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nambers. | Acres. | Assessment. | Numbera. | Acres. | Antessment. | Nämbera | Acres. | Assemment. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | -11 |
| Tutal Gozernment arable land ... | In 43   <br> In 14   <br> villages $\ldots$ .. |  | $\begin{gathered} \text { A. g. } \\ 53,236 \quad 29 \\ : \mathbf{2} \end{gathered}$ | $\begin{array}{cc} \text { Rs. a. } & \text { p. } \\ 1,55,89412 & 0 \\ \ldots \ldots . & \end{array}$ | $\begin{array}{r} 23,958 \\ 5,537 \end{array}$ | $\begin{array}{cc} \text { A. } & \text { g. } \\ 53,980 & 26 \\ 10,879 & 30 \end{array}$ | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 1,62,712 & 12 & 0 \\ 55,350 & 0 & 0 \end{array}$ | 355 | A. $g$ 74337 ... | $\begin{array}{ccc} \text { Rs. } & \text { a. } & \text { p. } \\ 6,818 & 0 & 0 \\ \ldots & \end{array}$ |
|  | Total | ... |  | . ...... | 29,495 | 64,680 16 | 2,18,062 $12 \quad 0$ | ... | ... | ... |
| Deluct-Gunwatted, \&c., land ... | $\begin{array}{lll}\text { In } 43 \\ \text { In } 14 & \text { villages } & \ldots \\ \text {, } & \text {... }\end{array}$ | $\cdots$ |  | $\ldots$ | ...' | .... | $\begin{array}{lll}681 & 6 & 3 \\ 250 & 9 & 5\end{array}$ |  | $\cdots$ | .... |
|  | Total ... | $\cdots$ | $\cdots$ | ...... | $\ldots$ | ... | 931158 | ... | $\cdots$ | ... |
| Remain | $\begin{array}{ll}\text { In } 43 \text { villages } & . . \\ \text { In } 14 & \ldots\end{array}$ | 23,603 $\ldots$ | 53,236 29 $\cdots$ | 1,55,011 $13 \quad 9$ | $\begin{array}{r} 23,958 \\ 5,537 \end{array}$ | $\begin{aligned} & 53,98026 \\ & 10,87930 \end{aligned}$ | $\begin{array}{rrr} 1,62,031 & 5 & 9 \\ 55,099 & 6 & 7 \end{array}$ |  | $743 \quad 37$ | $\begin{gathered} 7,019, ~ \\ \ldots \end{gathered}$ |
| $\cdots$ | Total | ... | ... | ...... | 29,495 | 64,860 16 | 2,17,130 $12 \quad 4$ | '-. | $\ldots$ | ... |
| Of this in Ranyat 1917 there were <br> A. D. 1860.01 | $\begin{array}{ll} \text { In } 43 & \text { villages } \\ \text { In } 14 & \ldots \\ \ldots & . . . \end{array}$ | 6,095 $\ldots$ | 16,453 20 | 37,696 00 | $\begin{aligned} & 6,284 \\ & 2,047 \end{aligned}$ | $\begin{array}{rr} 16,839 & 14 \\ 4,587 & 29 \end{array}$ | $\begin{array}{lll} 38,186 & 0 & 0 \\ 19,550 & 4 & 0 \end{array}$ |  | 385 341 | $\begin{array}{ccc} 490 \quad 0 & 0 \\ \ldots \end{array}$ |
|  | Total | ... | ... | ...... | 8,331 | 21,427 3 | 57,736 40 | $\ldots$ | ... | ... |
| Remain cultivated... .o. | $\begin{array}{ll} \text { In } 43 \text { villages } & \ldots \\ \text { In } 14 & , \\ \end{array}$ | 17,508 | 36,783 9 | 1,17, $11513 \quad 9$ | $\begin{array}{r} 17,674 \\ 3,490 \end{array}$ | $\begin{array}{rr} 37,141 & 12 \\ 6,202 & 1 \end{array}$ | $\begin{array}{rrr} 1,23,845 & 5 & 9 \\ 35,549 & 2 & 7 \end{array}$ | 166 | 3588 | $\begin{array}{r} 6,529 . \\ \hline \end{array}$ |
|  | Total | $\ldots$ | ... | ...... | 21,164 | 43,433 13 | $1,59,394$ 8 | ... | $\ldots$ | ... |
| Deituct-Land resigned | $\begin{aligned} & \text { In } 43 \text { villages } \\ & \text { In } 14 \quad \text { " } \end{aligned}$ | 1,403 $\ldots$. | 3,520 22 | 9,213 80 | $\begin{array}{r} 1,403 \\ 280 \end{array}$ | 3,51137 60434 | $\begin{array}{lll}9,241 & 4 & 0 \\ 2,420 & 8 & 0\end{array}$ | $\cdots$ | $\ldots$ | ... |
|  | Total | ... | . ... | ...... | 1,683 | 4,116 31 | 11,661 $12 \quad 0$ | $\ldots$ | ... | ... |
| The remainder, cultivated ... | $\begin{array}{ll} \text { In } 43 \text { villages } & \text {.. } \\ \text { In I4 }!! & \because, \end{array}$ | $16,105$ | 33,262 27 $\cdot \ldots$ | 1,08,102 $5 \quad 9$ | $\begin{array}{r} 16,271 \\ 3,210 \end{array}$ | $\begin{array}{r} 33,629 \quad 15 \\ 5,687 \quad 7 \end{array}$ | $\begin{array}{r} 1,14,604 \\ 33,128 \\ 10 \end{array}$ | 166 | 36628 | $\begin{gathered} 6,501 \quad 120 \\ \ldots \end{gathered}$ |
|  | ''otal | ... | ... | ...... | 19,481 | 39,316 22 | 1,47,732 $12 \quad 4$ | ... | ... | ... |

TABLE II-continued.

|  |  | Firat Clasamitation. |  |  | Revisid Clasquioatiox. |  |  | Increare capsed by time Revimonof Clashification. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Numbers. | Acres, | Assessment. | Numbers. | Acres. | Ascessment. . | Numbera | Acres. | Ascessment. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Add-Numbers newly taken up. <br> Total cultivation and revenue of Government arable land for Samvat 1918. <br> A. D. 15611.62 | $\left\|\begin{array}{lll} \text { In } 43 & \text { villages } & \ldots \\ \text { In } 14 & , & , \ldots \\ & \text { Total } & \ldots \\ & \ldots \end{array}\right\|$ | 2,762 $\cdots$ | A. $\cdot \mathrm{g}$. $6,728.24$ $\cdots$ | $\begin{array}{ccc}\text { Rs. . a. } & \text { p. } \\ \text { 18,408 } & 8 & 0 \\ \ldots \ldots . & \end{array}$ | 2,703 758 | $\begin{array}{cc} \text { A. } & \text { g. } \\ 6,769 & 17 \\ 1,539 & 26 \end{array}$ | $\begin{array}{rrr\|} \text { Rs. } & \text { a. } & \text { p. } \\ 18,355 & 0 & 0 \\ 7,847 & 12 & 0 \end{array}$ | 31 .. | $\left\|\begin{array}{cc} \mathrm{A} \cdot \mathrm{~g} \cdot \\ 20 & 33 \\ \cdots \end{array}\right\|$ | $\begin{array}{lcc} \hline \text { Rs. } & \text { a. } & \text { p. } \\ 46 & 8 & 0 \end{array}$ |
|  |  | . | ... | ...... | 3,551 | 8,289 3 | 26,202 120 | ... | $\cdots$ | ... |
|  | $\left.\begin{array}{\|cc\|} \text { In } 43 & \text { villages } \\ \text { In } 14 & \ldots \\ & \ldots \\ & \text { Total } \end{array}\right)$ | 18,867 $\cdots$ | 39,99111 $\ldots$ | 1,26,410 $13 \quad 9$ | 19,064 3,968 | $\begin{array}{r} 40,37832 \\ 7,22633 \end{array}$ |  | 197 | $38721$ | 6,548 4.0 |
|  |  | ... | $\cdots$ | $\cdots$ | 23,032 | 47,605 25 | 1,73,935 818 | ... | $\cdots$ | $\cdots$ |
| Net waste | $\begin{array}{\|cc\|} \text { In } 43 & \text { villages } \\ \text { In } 14 & \ldots \\ & \ldots \\ & \text { Total } \\ & \ldots . \end{array}$ |  | 13,245 18 | 28,600120 $\ldots \ldots$. | $\begin{aligned} & 4,894 \\ & 1,569 \end{aligned}$ | $\begin{array}{r} 13,60134 \\ 3,6 \dot{3} 237 \end{array}$ | $\begin{array}{lll}29,072 & 4 & 0 \\ 14,123 & 0 & 0\end{array}$ |  | 35616 | $\begin{array}{ccc} 471 \quad 40 \\ \ldots & 0 \end{array}$ |
|  |  | ... | ... | $\cdots$ | 6,463 | 17,254 31 | $43,195 \quad 4 \quad 0$ | ... | ... | ... |
| Not increase in the year ... | $\begin{array}{\|ll\|} \hline \text { In } 43 \text { villages } & . . . \\ \text { In } 14 & \prime \end{array}$ | $1,359$ | 3,208 2 | 9,095 00 | $\begin{array}{r} 1,390 \\ 478 \end{array}$ | $\begin{array}{r} 3,23720 \\ 93432 \end{array}$ | $\begin{array}{rrrr}\mathbf{9 , 1 1 3} & 12 & 0 \\ 5,427 & 4 & 0\end{array}$ | 31 | 2918 | $18120$ |
| Remissions to be deducted. Nominal caused by the revision |  Total $\ldots$ <br> In 43   <br> In 14 villages $\ldots$ <br>   $\ldots$ <br>  Total $\ldots$ | ... | $\cdots$ | $\ldots$ | 1,868 | 4,172 12 | $14,541 \quad 0 \quad 0$ | ... | ... | ... |
|  |  | $\cdots$ | $\ldots$ | ....... | ... | $\cdots$ | $\begin{array}{ccc}8,116 & 4 & 0 \\ \ldots \ldots . & \end{array}$ | ... | $\cdots$ | $\cdots$ |
| On account of failure of crops ... |  | ... | $\cdots$ | -.... | ... | ... | 8,116 40 | ... | $\cdots$ | - ${ }^{-\cdots}$ |
|  | $\begin{array}{ll} \text { In } 43 \text { villages } & \text {... } \\ \text { In } 14 \end{array}$ | $\cdots$ | $\cdots$ | ...... | $\cdots$ | $\cdots$ | 50413 4,767 8 | $\ldots$ | $\cdots$ | ... |
| Total remissions |  Total $\ldots$ <br>   - <br> In 43 villages $\ldots$  <br> In 14 $\ldots$ $\ldots$ | ... | -.. | .... | ... | ... | 5,272 56 | ... | ... | ... |
|  |  | $\cdots$ | $\ldots$ | ...... | ... | $\cdots$ | $\begin{array}{lll}8,621 & 1 & 6 \\ 4,767 & 8 & 0\end{array}$ | ... | ... | $\ldots$ |
|  |  | $\cdots$ | ** | $\cdots$ |  | $\cdots$ | 13,383 9 6 | $\cdots$ | $\cdots$ | $\cdots$ |



Captan C. J. PRESCOTT,

Superintendent of Survey, Gujarát.
Camp Naroda, 29th Junuary 1868.
Sir,
Mr. Pedder's report No. 27, dated 16th October 1862, has been forwarded to me by the First Assistant Collector in charge with.

Jamábandi "ettlement of Jetalpur for 1861-62.
To Collector, Ahmedabad, No. 170 of 26th Janaary 1861.

From Mr. Rogers, No. 94, of 5th February 1861 (copy appended for facility of reference).

Vide paragraph 3 of his letter.

## 2. In drawing your attention

 to the correspondence marginally noted I have the honour to request you will be good enough to state why a report, as called for by Mr. Mansfield, has not yet been sub. mitted.3. The correspondence on record regarding the revision of the assessment of the Jetalpur Pargana is in a hopeless state of confusion, and it is very desirable that a clear and succinct report should be prepared for submission to Government whose orders should have been obtained long ago considering that the new rates were introduced in 1858-59. I beg, therefore, that you will favour me with such a report at your early convenience.
4. I beg also that you will favour me with your own opinion whether this assessment should be confirmed without correcting any of the errors referred to by Mr. Pedder in his 33rd paragraph.

I have, \&c.,<br>B. H. ELLIS,<br>Revenue Commissioner, N. D.

$$
\text { No. } 79 \text { of } 1863 .
$$

From

## Captan C. J. PRESCOTT,

 Superintendent, Revenue Survey;To

## Tay REVENUE COMMISSIONER, N. D.

 Camp Kaira, 14th February 1863.Sir,
I have the honour to acknowledge the receipt of your letter No. 297, of the 29th ultimo, calling upon me to furnish a clear and

Revision of the survey eettlement of Jetalpur. succinct report on the revision of the survey classification and settlement of táluka Jetalpur, and requesting to be informed why such a report had not been already submitted.
2. In reply I have the honour to state that I prepared a report (which I

Revence Commissioner, N. D., to Mr. Rogers, No. , 8th April 1861.

Mr. Rogers' endorsement 256 of loth April 1861. bave now the honour to forward) describing in detail all my proceedings in connection with the revision of the classification and assessment of water in Jetalpur. This report was forwarded through Mr. Rogers, who returned it with his endorsement noted in the margin, -with a request that it might be embodied in the general report. Believing that most of the essential portions of this statement were embodied in the jamábandi report submitted by Mr. Pedder, and thinking that the Jetalpur correspondence had already exceeded all ordinary limits, I refrained from writing any more on the subject.

I have, \&c.,

# Revenoe Departuent. 

To

> Tae Honovrable Mr. A. D. ROBERTSON, Officiating Chief Secretary to Government, Bombay . Camp Kelvi Máhim, 21st April 1864.

Sir,
On receiving charge of this office in March 1862 I found that the revision - of the assessment of the Jetalpur Pargana had not Revision of assessment in been reported to Government, although the new rates Jetalpur Ahmedabad, ace cording to the revenue sarvey prineiples. were introduced in 1858-59. The papers already in the office were incomplete, and further steps were delayed pending the receipt of a report on the re-classification of several villages, as promised by Mr. Rogers and Captain Prescott so far back as April 1860.
2. Some correspondence did take place subsequently, but the required information not having been received.up to January 1861, Mr. Mansfield, on the 26th of that month, wrote to Captain Prescott requesting that the whole of the papers might be, re-cast into gne report, to admit of the case being laid before Government in an intelligible form. On attempting to review the correspond-
*29th Jannary 1863. ence I found it in a state of hopeless confusion, and accordingly, in ${ }^{*}$ calling Captain Prescott's attention to Mr. Mansfield's letter asking why the report had not been rendered, I remarked, "it is very desirable that a clear and succinct report should be prepared for Government, whose orders should have been obtained long ago, considering that the new rates were introduced in 1858-59. I'request you will favour me with your own opinion whether the assessment should.be confirmed."
3. This report is now submitted to His Excellency the Governor in Council. I intended to forward it last monsoon, but there were

No. 78, dated 14th Feb. ruary 1863. still certain points which required to be cleared up; and as I had to wisit the Ahmedabad districts this season, I let it lie over till I could satisfy myself from personal inquiry.
4. Before proceeding to the subject matter, I consider it necessary to premise that the delay in the submission of a report on the revision of the Jetal: pur assessment is owing entirely to the confusion caused by the irregular proceedings of the late Superintendent, Captain Cowper. These proceedings even-

See Government Resniution No. 3785, dated 26th September 1859. tually led to his being remanded to his corps. Much has been done since to rectify the errors; further measures are still in progress ; and I hope that the assessment of the district will this season be placed on as satisfactory a footing as circumstances will admit of.
5. Captain Prescott's report contains a summary of all important subjects connected with the revision. It is full and comprehensive, and I beg to refer to it for particulars.
6. The pargana of Jetalpur is very small ; it consists of 62 villages, of which 5 are alienated. The area is only 173 square miles. I have recently submitted to Government a proposition for abolishing it as a separate Mámlatdar's charge, and for incorporating its villages in the neighbouring talukás of Daskroi and Mehmadabad.
7. The rates introduced are detailed in Captain - Prescott's 3rd paragraph and its clauses; they were fixed by Mr. Rogers as follows :-
I. Assessment on dry-crop lands.
II. Assessment of rice lands.
III. On garden lands watered from wells.
IV. Do. on lands adjoining rivers irrigated by water raised from those rivers.
V. Assessment on water taken from rivers for the irrigation of alienated lands.
-362-k
8. The rates in Nos. I, II, and III remain intact, notwithstanding the pitch of the assessment under No. I is exceedingly low, and the lands in II and III have been classified a second time.
9. The assessment in No. IV was found to be very faulty. It has formed the subject of much correspondence and personal discussions on different occasions, and the result is that a further re-classification of the lands has been determined

Vide paragrsph 32 of Cap. tain Prescott's report. upon. The work has just been finished. The result I understand is most satisfactory, and proposals for new rates in supersession of the present system will be submitted in due course.
10. The water rate under No. V has been disapproved by Government

Videcorrespondence ending with Revenue Oommissioner's letter No. 1116 A, dated 4th June 1863. and expung e lfrom the general settlement. Such of the alinated lands, however, as were subject to a tax under the former system will still be liable to the payment in a commuted form.
11. The financial effects of the new rates are discussed in paragraphs $\mathbf{3 0}$ and 31 of Captain Prescott's report. The statement in paragraph 30 gives the "kamál" assessment at Rs. $3,66,257$, but this amount will be further altered in consequence of the proposed settlement of bhatha lands, the amount of assessment on account of which I have not the means of separating from the general Ggures.
12. The season of 1861-62, in which the revision was finally carried out, was very unfavourable. The deficiency of rain in' August and September rendered it particularly so to rice crops.
13. Mr. Pedder, who originally prepared the statement above alluded to, and who settled the jamábandi of the whole pargana, has commented on the result in the following terms:-
(a) "The increase in the total number of survey fields and in the total arable area (columns 4 and 7 ) is caused by large and unassessed fields, particularly in bhátha lands in the beds of rivers, having been cut up and assessed during the revision.
(b) "The 'increase (292.35 acres) in the arable ared of Government lands is caused by alienated lands found to be held in excess of the recorded area having been resigned by their owners and entered as Goveroment.
(c) " The total assessment of the 14 Khari villages according to the first classification was Rs. 1,10,033-8 and according to the revised classification is Rs. $99,986-8$, showing a decrease of Rs. 10,047 . The cause of this decrease is the reduction of the water classification in the rice lands irrigated from the Khári, which has lowered the assessment of those lands from Rs. $95,958-12$ to Rs. 85,700 . In the remaining 43 villages of the par--gana the fotal assessment according to the first classification was Rs. $2,56,026-42$ and according to the revised classification is Rs. 2,66,270-8-. an increase of Rs. $10,243-12$. The assessment of dry-crop lands has been raised from Rs. to 97,546-2 to Rs. 98,897-10-an increase of Rs. 1,351-8. The cause of this increase, the classification of dry-crop lands not having been revised, is owing partly to the cutting up of large unassessed numbers, and partly to lands originally classed as garden having now been entered as dry-crop, the wells being found to be out of repair. The original assessment of garden lands was Rs. 20,244-10, which has been reduced to Rs 19,990-12 -a decrease of Ris. of Rs. 253-14. This is owing partly to wells having fallen in, partly to some wells having been erroneously classed as sweet when they were salt or brackish, and partly to lands which had no right to water having been wrongly classed as irrigated from certain wells. Rice lands were originally assessed at Rs. $1,38,236$, which has been raised to Rs. $1,47,382-2$-an increase of $\mathrm{Rs} .9,146-2$. This increase is caused by the operation of the new scale for the classification of rice lands.
(d) "The total assessment of the pargana according to the original classification was Rs. 3,66,060-4 and according to the revised classification Rs. 3,66,257-an apparent increase of Rs. 196-12. But as the area of arable
land has been enlarged by the cutting up of unassessed numbers, the real effect of the re-classification has been a slight decrease in the assessment of the whole pargana. This decrease, however, falls on the assessment of alienated lands, and there is an increase of Rs. 848 in the assessment of Government lands. You will thus see that, as was anticipated, the decrease in the assessment of the 14 Khári villages, caused by the revision of classification, has been as nearly as possible balanced by an increase in the assessment of the rest of the district. Mr. Rogers, in reporting on the revision of assessment in Jetalpur, estimated that the total assessment of all the Government lands of the pargana according to the rates he proposed would be Rs. 2,00,175. Yöu will see that the total assessment of Government lands is Rs. 2,18,062-12, or Rs. 17,887-12 above the estimate.
(e) "The average rate of assessment in Jetalpur is for dry-crop lands Rs. 1-12-7 per acre, for garden lands Rs. 5-5-8, and for rice lands Rs. 6-12-3. The average size of fields is $2 \frac{18}{10}$ acres, and the average assessment of each field Rs. 7-14."
14. The general effect of the new settlement is thus described by Mr. Pedder:-
" During thirty years preceding the introduction of the survey system into Jetalpur, the average aunual assessment of cultivated Government lands was Rs. $1,58,028$ and the average realisations Rs. $1,50,043$. In the year A. D. 1858-59, in which the survey settlement was introduced, the Government land under cultivation was $33,857 \frac{9}{20}$ acres, assessed under the old system at Rs, 1,56,384-9-10, which sum was reduced by the settlement to Rs: 1,29,789-15-an immediate decrease of Rs. 26,594-10-10. This year the cultivated area is $47,632{ }_{61}^{31}$ acres assessed at Rs. $1,73,935-8-4$. $^{\circ}$ There is thus an increase in the assessment over the thirty years' average realisations of Rs. 23,892-8-4, and over the last assessment under the old system of Rs. 17,550-14-6, to which must be added Rs. 1,141-9 on account of unassessed bhátha lands, reckoned in the cultivated area according to the oold system, but excluded from it by the survey; while in three years, from 1858-59, the yeur in which the survey settlement was introduced, to 1861-82, cultivation has increased by 13,748 ${ }_{60}^{18}$ acres and revenue by Rs. 44,145-9-4."
15. Rs. 13,388-9-6 were remitted at the jamabandi settlement; but of this amount Rs. 8, ${ }^{116-4}$ may be said to have been nominal, the sums foregone being the amounts of difference bet een the assessment under the revised classification and that leviable under the former classification. The remainder (Rs. 5,272-5-6) consists of remissions, on account of the failure of rice crops, in accordance with Mr. Rogers' rules, These rules have been under consideration for some time past, and I am about to report to Government on the subject. It will be for Government to decide whether the rules are to be confirmed or not when the settlement is guaranteed.
16. Paragraphs 41 to 56 contain Captain Prescott's views in reply to my inquiry whether the Jetalpur assessment should be confirmed without further correction of errors. I must state that I am not yet satisfied with the rates. The dry-crop rates are lower than they ought to be, even when considered with the general circumstances of 1858-59; and the bagaít rates were settled on principles which have been much modified in subsequent settlements of other districts. On the other hand, the water rates for rice are too high, except in the Khari villages, where the water resources have recently been greatly improved, and Mr. Bulkley has thoroughly revised the former classification.
17. The water rates for rice being too high, there is a chance of the settlement breaking down, and if in an unfavourable year the cultivators be unable to pay the rice rates, Government will be left to collect only an unduly low. dry-crop rate. But as on the average the assessment amounts to about what it ought to have been as a'whole, it is possible that the settlement will stand, especially as the district is steadily improving with the present high prices of produce.
18. With the exception, therefore, of the bhatha lands, the settlement of

Fide the objections to the settlement as stated in paragrapha 49 to 54. of Captain Prescott's report. which could not be confirmed, I considered that it would be best not to attempt any further revision, and I would now propose to Government to confirm and guarantee the rates on the dry-crop, rice, and garden lands.
19. But I do not recommend that the guarantee be given for the full period of thirty years. It will be safer to guarantee the settlement only to 1872-73, , and leave it to be then determined after further experience whether the guaran. tee should be given for the rest of the survey period, or whether the whole or a portion of the settlement should be revised.
20. Propositions for the final settlement of the bhátha lands will be sub. mitted as soon as I receive Captain Prescott's report. The revision includes all such lands in Ahmedabad, Daskroi, as well as in Jetalpur.
21. In conclusion, I have to beg that Government in reviewing this settle. ment will bear in mind that the present officers of the survey are in no way to blame for its defects. Mr. Rogers, the Settlement Officer by whom the rates were first introduced, had great difficulties to contend against, as will be seen by reference to the correspondence which led to remopal of the late Superintendent

## Quoted above in paragraph

 4. of Survey. Captain Prescott and Mr. Pedder, the present Superintendent and Settlement Officer, have had hard work in correcting former errors, and have not received the credit to which they are entitled; for, as Government areaware, such revision is not even counted in the progress reports as work done, and the correction of the mistakes of others is, at best, but a thankless office. If, however, (as I trust it will), the settlement as now revised prove successful, these officers will, I qm sure, consider that their exertions have been fully rewarded.> I bave; \&c.,
> B. H. ELLIS,
> Revenue Commissioner, N. D.

## Sir,

I have the honour of submitting a report and précis of correspondence

Revision of the classifica. tion of Jetalpar.
Water classification.
relating to the late revision of the classification in the Jetalpur Pargana of the Ahmedabad Collectorate.
2. The correspondence may be said to commence with the letter marginally noted, which states that Mr. Rogers only received the lists of garden lands in Jetalpur on the 28th of May, and when they did come he discovered an "almost incredible number of errors " in the classification of rice

Settlement Officer to Revenue Commissioner, N. D., No. 74, dated 16th June 1859. lands throughout the district, and consequently intends making a special report with a view to the classification being done over again, and has informed the rayats that the asseasment is liable to a further revision,
3. In this letter Mr. Rogers submits proposals for the revision of the assessment in Jetalpur, and (paragraph 1) explains that

Settlemont Officer to Col lector of Ahmedubad, No. 137, dated 10th September 1859. the lateness of this report is caused by his not having received the statements relating to garden lands, so that he could not form an estimate of the fair pitch of assessment to be thrown on those lands till the end of the fair season.

Paragraph 2 explains that the revenue history of the district will be treated

Vide paragraph 8 of report on the Taluser Daskroi by Superintendent Revenae Survey to Collector of Ahmedabad, No. 128 of 1860. of in the report in the adjoining taluka of Daskroi. The district of Jetalpur consists of 57 khálea villages, 2 inámi, 1 dharmáda, and 2 devasthán-total 62, Of these, 43 belonging to Daskroi and 5 to Dholka were formed into the new táluka of Jetalpur (according to the Government Resolution No. 873 of 1840 , and 14 villages from Mátar were afterwards incorporated with them according to the Government Resolution No. 5727 of 28 th September 1852), in order to bring all the villages deriving water from the Khári River under the same revenue management.

Jetalpur is of the form of a right-angled triangle, and is bounded on the
Boundaries of Jetalpar. north by Daskroi, on the west by Dholka, on the south and east by Mátar, and is intersected and partly bounded by three rivers-the Sabarmati, the Khari, and the Meshva.

The soil is principally sandy goradu (which is composed of light, almost white particles), except in the south and east part of
Sail. the district, in which it becomes blackish, but not of the fine quality found in the south of Dholka.

The pargana is so small that there is no roam for any variations of climate,
Climata. and therefore dry-crop rates can only be classed with regard to the markets.
As regards the rates to be imposed on rice and bágitit lands, (Mr. Rogers pays), the natural features of the country enable us to form a judgment of the relative maximum rates which it is desirable to adopt-

1st.-The most valuable garden lands are the bhatha lands liable to be overflowed by the freshes of the river Sábarmati, as sugarcane can often be grown in them without any expense for manure.

2nd.-The water of the other two rivers is also used to irrigate sugarcane and other superior crops, but is not so valuable as that of the Sábarmati,

Srd,-The country is undulating, and the drainage collects in the hollows, which have been turned into extensive rice beds, producing rice of superior descriptions with tolerable certainty, except in very scanty monsoons.

4th.-The best rice beds are those of the villages near the "Khari," watered from the sluice-gates and temporary dams in that river, in conse. quence of which they can get a first crop from flood water, and a second with labour comparatively little to that required in raising water from wells. The revenue system stands in great need of reform. In 9 villages it was jinnasvar or a crop bighoti. In 13 others a system of fixed bighoti, apparently settled by a pancháit at some remote period, still exists. This is very troublesome, as the reductions necessary for converting the original currency into Company's rupees has introduced into the assessment fractional parts of a rupee to an inconvenient extent. In one village the system, originally narvadari, is now bhagbatai. Of the remaining xillages, fixed bighoti rates were introduced-

| In 5 b | y | kson | ... |  | in 1837-38 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | S | Arbu | ... | $\cdots$ | in 1842-43 |
| 6 |  | ... | ... | ... | in 1844-4.5 |
| 1 |  | ... | ... | ... | in 1845-46 |
| 15 |  | $\cdots$ | $\cdots$ | ... | in 1850-51 |
| 2 | 1 | ... | ... |  | in 1853-54 |

As the revisions of the assessment are so partial in their operation, "they do not afford separately sufficient grounds upon which to rest arguments as io
the suitableness or otherwise of the pitch of assessment adopted," and a diagram has been consequently prepared for the whole 57 villages. These returns of area and assessment have been obtained in a tolerably perfect form for thirty years, i.e. from 1828-29.

According to the old survey : remark-books the number of inhabitants of
Population. the villages comprised in the pargana in 1821-22 was 39,412 . It is now 53,209 -an increase of 13,797 , or 35 per cent. in thirty-six years.
The average area of Government land under cultivation for the first five years in the diagram (i.e. from 1828-29 to 1833-34) was 28,326 acres; during the last five years in the
Area under oultivation. return 31,331 acres, being an increase of 3,005 acres, equal to about $10 \frac{1}{1}$ per cent.

It is to be remarked that in some lightly assessed villages of Viramgán in less than twenty years the increase of cultivation was about 69 per cent.

Mr. Rogers here shows that prices had been steadily falling for the series
Agricaltaral prodace. of years shown in the diagram, and states his opinion that the rise of prices which had taken place in the last two or three years was owing to exceptional causes, and would be found only temporary, and adds that, as there is a large increase of population and a large quantity of waste land, cultivation would have increased more than it has done had the rates of the assessment not been too heavy.

The average realisations during thirty years in all cultivated Government lands has been about Rs, 5 -2 per acre. This is exactly the same average as in the higher assessed Dholka villages (i.e. the jinnásvar bighoti ones); but the satious. general average in Dholka was Rs. 3-15-4; equal to Rs. 1-2-8 below the average in Jetalpur, so that Jetalpur is much more heavily assessed than Dholka; notwithstanding which the area of cultivation in Jetalpur has slightly increased, while that in Dholka has actually decreased, the reason apparently being-

1st.-TThe population in Jetalpur has increased 35 per cent., against 22 per cent. in Dholka.

2nd.-Jetalpur is better off for markets than Dholka.
3rd.-The sluice-gates recently erected on the "Khári" has brought a large area under cultivation.
The average assessment of Government lands for thirty years has been
Remiesions. about Rs. $1,58,028$, and the average realisations Rs. $1,50,043$, showing about Rs. 8,000 remitted or struck off the books as irrecoverable, and the average remissions for the last ten years have been more than Rs. 9,500 a year. Besides this (Mr. Rogers adds) it must be borne in mind that each year there were large outstanding balances left for collection in subsequent years at an expenditure of time and trouble, to say nothing of the frauds entailed thereby.

On this subject Mr. Rogers remarks that as the district is in the immediate neighbourhood of the good markets of Ahmedabad,
Proposed gronping of villages. Kaira, Mátar, and Mehmadubad, and has in itself the great rice staple of Bareja, besides smaller markets in several of the larger villages, it is much batter off than "Dholka," and the rates must be higher in consequence; and adds that the best market being Ahmedabad, the first group of villages must be those which are nearest to it.

The maximum rate for dry-crop soils in the 1st class group of villages in Dholka was Rs. 2-4 an acre. Mr Rogers thinks, for the reasons stated above, that Rs. $2-8$ should be the maxinum dry-crop rate for the majority of villages in Jetalpur, and proposes to raise it to Rs. 2-12 for the 1st class villages near Ahmedabad, and to lower it to Rs. 2-4 and Rs. 2 in a few villages not so favourably situated as regards markets.

The following is Mr. Rogers' grouping, the maximum proposed for each group, and the number of villages in each group:-

138-47
1gt Cuags-Maximum Re. 2-12 per Aort.
Number of Villages 3.

1. Sahijpur. 2. Lámbha. 3. Luxmipura.

2nd Clabs-Maximum Res. 2-8 per Aore
Number of Villages 42."

1. Bakrol.
2. Visalpar.
3. Palri.
4. Kamod.
5. Od.
6. Girámthe.
7. Náj.
8. Jetalpur.
9. Usiali.
10. Chowsur.
11. Gámri.
12. Devri.
13. Hathiján.
14. Badodra.
15. Undrail. ,
16. Harniáp.
17. Bhuval.
18. Hirapur.
19. Damatyán.
20. Jinghur.
21. Rohusa.

18: Ráska.
19. Kunej.
20. Nándej.
21. Barejri.
22. Istulabad.
23. Mahuj.
24. Láli.
25. Biraj.
26. Báreja
27. Wusai.
28. Mahijra.
29. Pinglaj.
30. Kanera.
31. Mulhárpara.
32. Goblej.
33. Pánsoli.
34. Navagam.
35. Chunindra.
36. Kulloli.
37. Naika.
38. Shetra.
39. Dámri.
40. Berai.
41. Duthal.
42. Wudála.

3rd Class-Maximum Rs. 2-4 per acre. Number of Villages 11.

| 6. Navápura (Daskroi) <br> 6. Kasindra. <br> 7. Miroli. <br> 8. Navápura (Dholka). | 9. Timba <br> 10. Kutpara <br> 11. Chitráar. |
| :---: | :---: |
| 4th Class-Maximum Rs, 2 prir | Ore. |
| Number of Villages 1. <br> 1. Tajpur. |  |

## 1. Tajpur.

Mr. Rogers goes on to state (paragraph 22) that, according to the average assessment for ten years, the rate on dry-crop soil was Rs. 2-7-4 per acre, the average remissions for that period being about 6 per cent; so that the average realisable assessment of dry-crop soil pay be set down at Rs. 2-5 for the whole pargana.

The average maximum rate for the whole district proposed being Rs. 2-8, and the average classification not quite 12 annas (Mr. Rogers calculates), the average reduction per acre will be about one-fifthi.

With regard to the assessment of rice lands, Mr. Rogers observes that as the Rice lands. rice of Jetalpur is of two kinds (one irrigated from the Khari River or from wells, in which case the first crop is tolerably certain, and a second crop probable; the other, dependent on rain alone, in which only one crop can be grown, and that only in good seasons), he considers it necessary to adopt the same mode of assessment as in Dholka (i. e., two distinct rates for soil and water), with a view to facilitate the granting of reaissions when the monso $n$ fails. He therefore now proceeds to examin $\phi$ (the soil rate being the same as for dry-crop) what the water rate should be. Mr. R),gers observes that the present bighoti rates of assessment for rice are exceodingly unequal and gederally very high. For example, in Miroli Rs. 15-13-6 per acre, and in many other villages from Rs. 13-8 to Rs. 14-8.

Mr. Rogers next observes (paragraph 24) that fixing on Báreja as the best rice market in the district, and Navágám as having the greatest facilities for water, and also taking into consideration the line of undulating country in the district which admits of the cultivation of rice in the bottoms already mentioned, the following grouping of villages and maximum rates for water are the best that can be adopted :-

1st Class-Maximum Rs. 10 per Acre.
Nunibér of Tillages 1.

1. Navágám.

## 2xd Cuass-Maxinum Rs. 9.8 par Agre. <br> Number of Villages 2. <br> 1. Pansoli. - | 2. Pinglaj.

3rd Class-Maximux Rs. 9 prr Agre. Number of Villages 11.

| 1. Naika. <br> 3. Duthal <br> 4. Kanera | 5. Goblej. <br> 6. Cbunindra. <br> 7. Katrára. <br> 8. Báreja. | 9. Wreai. <br> 10. Timba <br> 11. Miroli. |
| :---: | :---: | :---: |
| 4ta Clasb-Maximux Rs. 8-8 ple Agre. Number of Villages 7. |  |  |
| 1. Dámri. <br> 2. Shetra <br> 3. Wudála <br> 4. Malhárpara. |  |  |
| 5th Class Maximom-Rs. 8 prr Adra. Number of Villages 16. |  |  |
| 1. Lémbha | 7. Devri. | 12. Mahis |
| 3. Jetalpur. | 9. Hathiján. | 14. Biruj. |
| 4. Od. | 10. Nándej. | 14. Chitragur. 16. Kulloli. |
| 5. Chawrur. |  |  |

6ta Class-Maxmum Rs. 6 prr Aorr.
Number of Villages 3.

1. Raska.
2. Harniáa,
3. Hirapar.
4. Rohisa.
5. Dhamatván.
6. Barodra.

7ta Cuass-Maximom Rs. 6 \& Rs. 5-8.
Number of Villages 11.
4. Jinghur.
5. Bhaval.
6. Undrel.
7. Istulábad.
9. Paldi.
10. Visalpur.
11. Luxmipura
8. Kamod,

8ti Cuass-Maxmum Rs. 5, Rs. 4-8 \& Rs. 4.
Number of Villages 6.

1. Navf̂pura (Dholka),
2. Bakrol.
3. Kasindra.
4. Navapura (Daskroi).
5. Tajpar.
6. Sahijpar.

Mr. Rogers (paragraph 26) states that according to these rates the maximum rate imposable on both soil and water combined is Rs. $12-8$ per acre in the village of Navagám (on the Khári River), but recommends, in consequence of the faultiness of the classification, that the whole should be done over, again, and thinks that when it (the classification) shall be rectified, the highest rate actually imposed will be found to be not more than Rs. 10-8 an acre, which, he remarks, is about 2 rupees higher than the highest rates imposed in Dholka. He here notes that the average realisations from rice lands according to the late system were about Rs. 7 -5 per acre.

Mr. Rogers in his 28 th paragraph remarks that as rights in wells in Jetalpur are tolerably clearly defined, and as the water is less liable to turn brackish than in districts previously settled, he considers it advisable, instead of imposing a separate rate on the water-
Water-bag assessment bag, as has been hitherto done, to assess land under sbandoned. wells at permanent garden rates,

The maximum rate he proposes is Rs. $8-8$ per acre; but this maximum rate will only be reached when the classification of the soil has been raised beyond the

- Extra qualities which maximum standard of 16 annas, which is sometimes raise the siil sbove the fixed the case in bhatha lands when the maximum may be maximam standard.
increased to 20 annas by ghuns,* thus increasing the assessment nearly one-fifth.

The average, Mr. Rogers anticipates, will not exceed Rs. 5, which is a considerable reduction below the average realisations from garden lands, which was Rs. 7-5 an acre.

This reduction Mr. Rogers thinks necessary to prevent those garden lands in which wells already exist being thrown up for the purpose of constructing new wells in dry-crop land under the Survey Settlement Rules.

Mr. Rogers states that the Superintendent of Survey (Captain Cowper) did not coincide in his opinion as regards the assessment of bagadit lands on this principle, on the plea that the tax would be evaded; but states his opinion that when the rates are fair and moderate it is not likely they would be evaded, and strongly recommends his plan to be adopted.

## Water raised from rivers.

For water raised from rivers Mr. Rogers proposes rates for each water-bag employed, as follows :-
Rs. 12 per bag on bags raising water from the Sábarmati River.
Rs. 8 per bag on bags raising water from the Khári and Meshva, in consequence of the supposed inferiority of the water of those rivers.
Considering that the water of all rivers belongs to the State, Mr. Rogers Piava. remarks that he has directed that in all cases in which permanent irrigated assessments have not been fixed on alienated lands watered from rivers, the same rate per water-bag when actually used to lift water shall be imposed as for Government lands, and when such alienated lands have been assessed at rice and garden rates, to levy the difference between the dry-crop and irrigated land assessment from every alienated number into which water may be conveyed.

> Letter of the Revenne Commissioner for Alienations, No. 2681 , dated 21 st August; and Resolntion of Government, No. 1128, dated 8 th March 1861.

Estimated results of settlement.
(Government totally disapproved of this plan, as set forth in the Resolution of Government in the correspondence noted in the margin.)
Mr. Rogers next estimates the result of his settlement as follows, subject to modification on the revision of the classification of rice lands :-

| Deseription of Land. |  | Aran |  | Roprrs, : |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cultivatod. | Wante. | On Cultivated. | On Waste. | Total. |
| Dry-crop Jand... |  | 18,120 | 22,654 | 31,710 | 39,644 | 71,354 |
| Garden lund ... | ... | 8,145 |  | 14,152 |  | 14,152 |
| Rice land ... | ... | 13,877 | 5,294 | 82,903 | 81,766 | 1,14,669 |
| Grand Total |  | .. | ... | 1,28,765 | 71,410 | 2,00,175 |

The average realisations for the last ten years on Government lands being

Average realisationg on Government lands.

Rs. $1,53,344$, and the estimate of the assessment of cultivated lands Rs. $1,28,765$, the estimated decrease caused by the survey is Rs. 24,579, or rather more than 16 per cent. This is exclusive of the revenues derived from grass lands, fruit trees, and unassessed lands in the beds of rivers to be annually sold by auction.

This decrease, Mr. .Rogers states, will be epeedily made op by waste lands being brought into cultivation.

Mr. Rogers then mentions that the total revenue derived from the total area of alienated lands in the district ham been about Rs, 1-7-6

Revenue derived from alienated landa. per acre, and that about 20 per cent. of the area liable to pay quit-rent has annually remained waste.
Mr. Rogers concludes this report (paragraph 36) by recommending that the permanency of the settlement should not be guaranteed, while such uncertainty exists regarding the suitableness of the classification.
4. To this report the Revenue Commissioner replied in his letter noted in the margin, that the document would have been more useful had the general results of the proposed revision of assessment been given on a calculation of the classification of the soils instead of an assumed average

Revenue Commissioner N. D. to Settlement Officer, No. 1952, dated 4th October 1859. assessment of Rs. 1-12 per acre, and requests therefore that the table calculated on the rates falling on each description of land may be submitted.
5. In reply to the above the Set-

Settlement Officer to the Revenue Commissioner, No. 160, dated 14th October 1859.

tlement Officer states that the actual figures are as follows:-
or about Ra. 16,000 in excess of the former estimate. Mr، Rogers remarks that the principal item of difference being in the assessment of rice lands, the result of the revision of the water classification will prove the original estimates to be not far wrong.
6. After the revised rates had been introduced, the Revenue Commissioner, N. D., (in the December following) called upon the Collector to explain " why the sum of Rs. 25,542-10-3, or 16 per cent. of the entire revenue, is outstanding on account of the Jetalpur district for the season 1858-59, in which the revenue survey settlement was introduced."
7. This letter was forwarded with the Collector's endorsement to the Settlement Officer for report.
8. Mr. Rogers reports that the principal reason for such large balances remaining outstanding is the lateness of the period at

Settlement Officer to Collector of Ahmedabad, No. 37, dated 26th January 1860. which the settlement papers were prepared, owing to the classification of garden lands having to be done entirely over again.
9. These errors in the classification were duly reported to the Revenue Commissioner in Mr. Rogers' letter noted in the margin, upon which the Resolution (hereafter quoted) directing the revision of the classification of Jetalpur, was passed by Government.
Settlement Officerto Revenue Commissioner, Na. 114, dated 30th Jaly 1859.
10. In the letter to the Revenue Commissioner noted above, Mr. Rogers notices in detail the errors complained of. He says "that the different shares of water held in wells by different individuals, and the land into which those shares were respectively taken for irrigation, were at first in many instances not entered at all in the statements furnished."

In his 9th paragraph Mr. Rogers observes "that the classification of rice in Setalpur is so entirely false as to render any assessment imposed according to it most equitable." In his 10 th paragraph Mr. Rogers states that when he examined and compared the garden statements with the classers, he almost invariably found the information connected with the same field differently entered in the two documents, and that the entries generally were so vague that he often could not tell from what wells the water came.

The Settlement Officer next notices in his 11th paragraph the classification of the villages drawing their supply of water from the Khari River, and observes that the sluice-gates and temporary embankments in the same, from which the rice is irrigated, make a first crop a tolerable certainty, and, except in very bad seasons, probably a second crop also. He observes that, except the best descriptions of rice, wheat, and barley, no superior crops, such as sugarcane, \&c., are produced in the villages irrigated from these sluice-gates, sand "that the lands on the ' Khári' River are therefore more valuable than other rice lands under sweet-water wells, by so much as the cost of raising water from the wells exceeds that of getting it flowing from sluice-gates or embankments, the crops raised in the 'Khári' villages being no better nor larger than those raised under wells in other parts of the district. The error that has been made in the classification has been that of putting the water of the Khári proportionably far too high in comparison with that of sweet wells. A large proportion of the classification of water in the ' $K$ hári' villages is from eight to twelve annas in excess of that of sweet wells in other parts of the districts, thus making a difference in the assessment at a maximum rate of Rs. 10, or from Rs. $2-8$ to Rs. 5 per acre."

Captain Cowper, Superintendent of Revenne Sarvey, to Revenue Commissioner, N.D., No. 283, dated 22nd September 1859.

Resolation of Government, No. 3785, dated 26th September 1859.
11. On this letter Captain Cowper, the then Superintendent, commented at great length, and the correspondence onded with the Resolution of Government removing that officer and appointing me Superintendent.
12. The Revenue Commissioner, N. D.., in handing up the correspondence to Government with his endorsement No. 1904, of the 29th September 1859, states that he is in not a position to offer any special remarks on the statements set forth by Captain Cowper with reference "to what has been urged by Mr. Rogers, they being mostly of a very technical character. As Captain Cowper has been removed from his appointment of Superintendent, these matters may be left to the consideration of Captain Prescott and Mr. Rogers, between whom it is hoped and trusted there will be more unanimity and cordiality of co-operation."
13. Upon this Government recorded the following Resolution :-" The only

Resolution of Government No. 3971, dated 6th October 1859, as vide Revenue Commissioner's endorsement No. 1996, dated 7th October 1859. .
point in Captain Cowper's letber which requires further remark is the question whether the Jetalpur classification should be done over again. 'On this point the new Superintendent should be directed to consult with Mr. Rogers, and it is hoped that some means of correcting past errors may be devised without the delay and expense which would be incurred by going over the whole again."
14. On my arrival in Surat on the 10 th of October 1859, I consulted Mr. Rogers as to how the instructions contained in the above-quoted Resolution of Government could best be carried out. His opinion was that the rates proposed and introduced were perfectly correct, and would be found suitable when the classification should have been revised.
15. I had nothing to do with those rates of assessment, and at that time was not responsible for the settlement. I therefore proceeded to perform my part of the operation (the revision of the classification), and on the 19th of October I instructed Mr. Harrington Bulkley to test very carefully the water classification in a number of

Reported to the Revenue Commissioner, N. D., in Mr. Rogers' letter No. 86y, dated 24th October 1859. villages pointed out, and gave him very minute and detailed orders how this duty was to be performed, in order that I might judge exactly to what extent the revision would have to be carried out.
16. On the 5 th of January following Mr. Bulkley submitted a report of his proceedings. He says : "The result, I regret to say, establishes the existence of numerous and grave errors, as reported by Mr. Rogers in his letter to Government."
17. The following js a short résumé of the progress of the re-classification
-Superintendent to Revenue Commissioner, N. D., No. 187, dated 8th May 1860, paragraph 21.
of water in Jetalpur, which was done according to a new scale constructed on the principle reported to the Revenue Commissioner in the *letter noted in the margin.

Superintendent to Oollector of Ahmedabad, No. 90, dated 24th March 1861.

Very early in January 1860 the Settlement Officer and myself met at Goblej, in the Jetalpur district, and proceeded to examine the classification of the villages receiving their supply of water from the Khári River.
18. Before entering into any explanation as to the nature of the faults we then discovered in the water classification, it is necessary to examine the annexed diagram, which will, I trust, elucidate my explanation:-

This diagram is supposed to represent a section of the "Khari" River (A), and a plan showing ground irrigated from it (B and C).

The blue line showa the highest point which flood water could reach to be classed as resting water (called technically baitha-páni).

The yellow line shows the ordinary level of flood water.
The red line shows the probable extent of land which could get water by lifting for a second crop in ordinary seasons.
19. It is to be premised that the "Khari" villages are famous for the production of a superior description of rice called "pankalli" and "kumod," which is similar to the "amba mohur" of the Deccan. All natives agree that this description of rice can never be produced in perfection (not even under the sweetest well) except by rain-water resting in the rice beds or by a constant supply flowing freely from a tank or river, or lifted from them by manual or bullock labour. This rice bears the highest price of any in the market.
20. It would appear that this fact weighed much too heavily in the balance when the Superintendent drew up his scale for the water classification of these villages. The crop is fully of the value it is represented to be, but to get that crop a certain and plentiful supply of water is absolutely necessary.
21. The Settlement Officer argued that a sweet well, certain notwithstanding the cost of raising the water, is as good if not better than the Khari River, with all its advantages and uncetainty.
22. Now the water rate for a rice field in a 1 st class position, receiving its water from a sweet well, was 16 annas, and from the Khár River 24 annas.
23. On examination of the work I found fields in the position shown by my blue line * classed at 24 annas for water, just the same as fields in the position shown by my red line. The classers acounted for this by saying this feld can get flood water and does get it. To a certain extent this was true, but it will be at once apparent that the real water value of the two fields is entirely different. In the very worst
$\dagger$ Vide diagram. seasons the fields on the level with the red linet will get flood water for a first crop, and in some situations for a second crop, by lifting with a "jilu." But what is the position of the fields on the level of the blue line if the fall of rain is scanty?

It is this : for a few days, probably when the flood is down, water does get to that high level, but for the whole remainder of the rice season the water may have to be lifted once, twice, or even thrice before it reaches that level, as shown in the margin, and that to save a first crop; I need not say that it can never get a
a.- first lift.
b.-second do.
o.-third do. second irrigated crop.
24. It is evident therefore that full provision should have been made for this in the scale, which was not the case, and the consequence was that the people were not satisfied with the assessment which resulted from this classification.
25. The water scale was divided into three classes only, viz. :-

24 annas 1st-class.
16 do. 2nd-do.
8 do. 3rd-do.

This scale was far too rigid for the delicate classification required for the "Khári" villages, and the drop from 24 annas to 16 annas "per saltum" was far too great and too sudden for the many conditions and variations of position with which the classer had in practice to deal.
26. After careful consideration the scale was re-cast, and every variety of position, every possible contingency of supply, distance from the source, difference of level, and every other possible advantage or disadvantage was allowed for.
27. After the completion of the Khari villages I proceeded to test the bagáit classification of some of the remaining 43 villages of this pargana which Mr. Rogers found especially untrustworthy. I found the entries in the remark books of the classers in the bagait statements, and in the rice in the classingbooks faulty. In many the entries respecting the same well were different in the different statements, and in very many cases the quality of the water was wrongly described. But in some villages the entries were correct, and the classification good.
28. The water classification, both rice and bágáit, was carefully revised in the whole of these 43 villages.
29. I now proceed to notice the effect the new classification of water has

Effect of the new classifica- had on the assessment of this pargana, the object of cion of water. it being-
1st.-To correct the numerous errors which had crept into the work from

- various causes.
$2 n d$.-To lower the rice assessment according to existing rates in the 14 villages drawing their supply from the Khari River, and to raise the assessment of rice watered from sweet wells- in the remaining 43 villages of the pargana.

30. The result is shown in detail in the accompanying statement, and may be thus summarised-
Colums 14 of Statement. Assessment of the 14 " Khári" villages


31. The result, as shown in this statement, is, as far as the classification is concerned, very, satisfactory, inasmuch as it proves that the scales employed succeeded in equalising the classification without any loss of revenue.

While the "patasthal scale" has equalised the classification of rice under the river by maintaining a correct relative value between fields of different positions, the sliding " motasthal". scale has slightly raised the rice under wells by making the water anna value fluctuate between 16 and 20 annas according to the quantity of rice actually under the wells, instead of maintaining a constant value of 16 annas, regardless of the area of rice dependent upon the wells in case of failure of the monsoon. While, therefore, the revenue of the 14 Khari villages derivable fromr rice was being lowered, that of the 43 villages derivable from rice under wells was being raised, which, as shown above in detail, resulted in the assessment of the entire pargana being very nearly the same under the new classification as it was under the old, although rice under rivers and tanks has been lowered 9 per cent., and rice under pwells raised 4 per cent.
32. This seems to be the proper place for observing that when the revision Superintendent, Revenue of Jetalpur was in progress it ..became apparent to Survey, to Revenue Com me that the principle of the assessment of water was misaioner, N.D., No. 424, altogether wrong in Gujarat, and although it was then dated 12th October 1860.
too late to alter the principle so far as that pargana was concerned, yef I determined to move superior athority to order a different system to be adopted in all future settlements, and made the following remarks, viz., "that the natural capabilities of the land is the source from which revenue ought to be looked for, and I pointed out that permanent lands situated under the banks of rivers which are always cultivated by means of irrigation, and when water is always procurable by the expenditure of a certain amount of capital and labour, are now taxed by a cess upon the !kutcha' well used to raise water in addition to the dry-crop rate," and added that they should, I think, be taxed "by a simple soil rate, the measure of which should be the relative salue of the produce to the labour and capital required to raise it."
"I also 'show in that report that when the shares of land and in wells" are unequal, or when some parties have no land, although they have shares in wells, great complications must ensue if it is attempted to bind up the assessment of the water with the land regardless of the separate rights of individuals; nd add further that a good system should provide for all cases ; and also that several difficult cases have-already occurred in the pargana of Jetalpur, although the new system was only introduced last year (1858-59) experimentally, and that I am much perplexed to know how to dear with them. Further, it seems that all these practical difficulties bave one origin, viz, the false principle of taxing wells indirectly by a rate upon the land instead of directly. All these difficulties have a tendency to depress the value of irrigated lands as compared with that of dry-crop lands, and this we should do our best to avoid."

It is remarked further that it is not alone the difficulties attendant on the administration of a settlement on this principle when once made to which attention is drawn, for the principle of making the settlement itself satisfactorily appears equally noticeable. "This system aims at great accuracy, which, if it does not attain the trouble and expense attendant on it, are entirely thrown away, even if it does not altogether break down."
" Now to attain this accuracy the officer making the settlement is entirely dependent upon the correctness of the information supplied to him upon a great number of minute particulars. Thus the mistake of a classer in the capacity or quality of the well, on the quantity of land capable of being irrigated by it, in the numbers the occupants of which have a right to water, in the shares of water, may, though each mistake may in itself be trivial, have effects fatal to equitable settlement as far as that well is concerned, and a complicated system of this kind cannot be defined by a few simple rules. Such rules and orders must be perpetually modified by fresh, ones to meet new difficulties perpetually rising to the surface, and the wore such orders, however well devised, are multiplied, the more likely is the native agency, however willing and zealous, to misunderstand them. Mistakes are made, corrected, and again made, the work is impeded or stopped, and mutual recriminations ensue.
33. How far the false system above described led to the mistakes in the first water classification of Jetalpur, superior authority can judge.
34. The correspondence recommending the change of system is so very copious that I cannot take up your valuable time by any more lengthy quotations, but will merely add that both Mr. Pedder and myself recommended that the difference in value between ordinary dry-crop and garden land should, in assessing the latter, be imposed on the well direct, and be shown as a separate item of assessment, by which all the difficulties complained of in the report under review would be got rid of.
35. To this report the Revenue Commissioner replied at great length, stating (paragraph 1) that during his tour in Gujarát he heard

Revenue Commissioner, N. D., to Superintendent, Revoune Survey, No. 2563, dated 19th November 1860. no complaints against either of the systems adopted by Mr. Rogers for the assessment of Government bígait lands, and that he saw no reason whatever for deviating from the course followed by Mr. Rogers in the Jetalpur district.
In his 5th paragraph Mr. Mansfield remarks that there is great difficulty in practice in carrying out the survey rules ; yet notwithstanding this Mr. Pedder and myself are in favour of making them "applicable to wells" which are "private property," and adds " how could you compel a sharer in a well who cultivates no land to pay any revenue? Water is not taxable per ae, but only through the land irrigated by it."
36. In paragraph 39 of my letter noted in the margin I observe that, if land

Superintendent to Oollector of Ahmedabad, No. 90, dated 24th March 1861. and water always went together in Gujarat, there would be no difficulty in fixing a water assessment on the former, which would hold good for the whole term of the thirty-years' lease. But now whenever a change of occupancy involving the separation of water privilege from the land occurs, the incoming tenant must petition to be relieved of the water rate, which, I go on to observe, I am respectfully of opinion is a proof that water is in reality taxed "per se," although we do not profess to do it. Now strictly according to survey rules such-fields (being recorded as bagaít, and assessed as such) should not be let for leas than the full survey assessment, and by letting them to the inceming tenant as above described, and in thus departing from the survey rules we tacitly admit the taxation of water " per se."

I go on to observe that it is simply impossible to work the present systern fairly or equitably for any length of time in cases of changes of occupancy, for if we remit the water assessment to an incoming tenant not having a right in the well, we depart from the survey rules by taking less than the full fixed assess. ment of the field; and if, on the other hand, we say to the outgoing tenant "if you give up your land you must give up your share of water too," we to all intents and purposes confiscate what superior authority has designated private property, and the Civil Court might not uphold us in so doing:
37. As the settlement of Daskroi proceeded we found more and more the difficulties which resulted from the system of bágait assessment then prevail. ing (which the Revenue Commissioner had directed should be continued), and we took advantage of Mr. Mansfield's presence in Ahmedabad to bring the subject again before him. After lengthened conversations on the subject he was convinced of the force of our arguments, and directed Mr. Pedder to submit a further report.
38. This report states the general principle recommended as follows : that in all lands irrigated from permanent wells the dry-crop assessment of the land calculated on the classer's annas should be kept distinct from the increase leviable or account of the capability of irrigation, and that these

Superintendent to Revenue Commissioner, No. 9, dated 9 th April 1861. two items of revenue should be shown in separate columns of the assessment rigister (ákárband)-the first as dry-crop assessment of the field, the second as a bagaít kasar. upon it,-and shows that the adoption of this principle is desirable for several reasons, the principal one being that it will facilitate the future administration of a surveyed district. It further notices one cther very
important reason for its adoption, viz., that is, wells in Gujarat are liable to fall in, dry up, or become salt, Government must, under the system prevailing, constantly be prepared either to make new wells or levy dry-crop assessment only on lands which are assessed at bágaít rates suddenly being deprived of water. In fact, if this is not done the lands will be thrown out of cultivation.

In this report it is recommended that bhatha lands on the sides of rivers which always contain water, and lands so situated on the banks of rivers that a constant supply of water can be thrown into them from bags drawn up from such rivers, shall invariably be assessed at permanent bágaít rates, excepting lands situated on rivers liable to chafige their course, in which case it may be advisable to assess the land by a bagaít kasar in addition to the dry-crop assessment.
39. The Revenue Commissioner in his letter noted in the margin sanctions

Revenne Commissioner, N. the system reconmended, and requests (paragraph. 1) D., to Superintendent of Revenue Survey, dated 11 th April 1861. I will be guided by the same if I find by experience no objections to them in practice, and (paragraph 2) directs in all cases hereafter the bagaít and jirait assessments should be shown separately in the survey records, and the bagait rate or kasar fixed with as few exceptions as practicable on the field in which the well is situated, and leviable from the cultivator who has the largest share in the well. He (paragraph 4) quite approves of the principle laid down for the assessment of "blattha" lands and lands itrigated by dhekudis.
40. Unfortunately the revision ot the classification of Jetalpur had been

Mr. Mansfield to Super intendent of Revenue Surver No. 2563 , dated 19 th November 1860 , paragraph 1. entirely completed before these orders were received, and the old system, both as regards the assessment of ordinary garden lands as well as bbátha and other lands irrigated from kutcha wells, or containing in themselves a sufficiency of moisture, were of necessity carried out according to the Revenue Commissioner's letter noted in the margin.
Revenne Commissionar's 4i. I have now the honour of replying to paraletter to Superintendent of graph 3 of your letter marginally noted, and of offerRevenue Survey, No. 297, dated 29th January 1863.
42. Had I been the head of this Department when the revision of the classification was proposed and commenced, I should have carefully examined the data upon which the proposed rates had been determined, but this had been already done by the Settlement Officer (Mr. Rogers), whose knowledge of the country and great experience in settlement work I considered a sufficient guarantee for their correctness.'
43. I am of opinion that the pitch of the dry-crop assessment in the Ahmedabad Collectorate generally (with the exception of the parganas of Daskroi and Parantij) is much too low, and considering the particular advantages which Jetalpur has with regard to markets and climate, it would no doubt bear a much higher rate

Mr . Pedder's Jaunábandi Report for Jetalpur, No. 27, dated the 16 th October 1862, to Collector of Ahmedabad. for dry-crop land.
44. This low assessment of dry-crop land has, however, been more than balanced by a very high water-rate on rice, and as there is a fair proportion of rice in almost every village, it may be assumend that Government receives its just dues on entire holdings (khaitás), and any loss which rayats may sustain in bad seasons in their rice holdings is more than balanced by the low assessment of the dry-crop portion of their khátás (holdings).
45. In the Khári villages, where the khatás are almost entirely rice, Government has just expended a large sum in perfecting the Khári River irrigation works, and I am of opinion that the water-rates are in consequence of these iusprovenments not too high, more particularly as the revised classif. cation of these villages pas been especially well done.
46. I may, however, here remark that in consequence of the low rates on dry-crop land it is very necessary indeed that remissions on account of failure

[^9]of rice crops, even in very bad seasons, should be given with the greatest cau-

Superintendent's memorandum, addressed to Revenue Commissioner, N. D., No. 20, dated 17th January 1863, paragraph 4. tion, and would most respectfully urge the necessity of adopting the rule recommended in my letter noted in the margin, viz., "that no remissions should ever be given except when two-thirds of the amount of the entire holding of any individual is rice land, and two-thirds of the rice crop growp thereon is entirely lost."
47. If this principle is maintained, I do not see either the necessity or expediency of interfering with the present rates of assessment.
48. It has already been explained that the principle of assessment of garden lands in Jetalpur is very faulty, and that the sanction for the improved system was received too late for adoption in that táluka I am nevertheless respectfully of opinion that it is not now advisable to attempt the introduction of the improved system of well assessment into Jetalpur, as it would be attended with considerable expense and loss of time without giving anything like a corresponding return of revenue.
49. The same may be said of the bhátha lands or rich alluvial deposits from the Sábarmati-River, which were assessed on the same principles as other lands.

Superintendent to Revenue Commissioner N. D., No. 25, dated 5th August 1862.
50. In my letter to the Revenue Commissioner ooted in the margin the faulty assessment of these rich "bhátha" lands was reported, and it was especially brought to notice-

1st.-That lands in which permanent wells did not happen to exist at the time of settlement were assessed at much lesis than their real value.

2nd.-That the revenue of the bhatha lands has a tendency to lessen every year, because it is of course the interest of the people to convert the "kutcha" wells into" pucka" or permanent ones, when of course only the dry-crop and not the kos rate can be levied.
srd. - That the pucka wells (the lands) under which were assessed at permanent bagaít rates) will all have probably fallen in in the next twenty years, when of course the owners of each well as it falls in will petition to be assessed at only dry-crop rates, so that before the end of the guarantee the whole of these lands (the most valuable of any) will probably be paying merely dry-crop rates.
51. The question to be decided is, whether are these bhátha lands, in which there are no permanent wells, to remain assessed as they are at present (i.e. merely at dry-crop rates, with an extra assessment imposed on the bag which lifts the water into them, either from a river or "kutcha" well, when irrigated), or at permanent bágáit rates imposed directly on the lands, whether permanent wells exist in them or not, on the assumption that water is one of the fertilising elements ever present in this description of land at a few feet below the surface, and whick can any time be had by digging a hole down to the water-bearing stratum.

Mr. Mansfield to Superintendent of Sarvey (without: No.), dated 11 th April 1861.
52. This principle has been sanctioned for future assessments, and way be applied in Jetalpur if Government should see fit to incur the expense which will be thereby entailed.
A re-examination of all lands on the banks of rivers would have to be made with a view of ascertaining which are bhatha. All excepting those in which there are permanent wells being at present classed and entered in the registers as simple dry-crop lands, there is no means of ascertaining correctly what are bhatha and what simple jiraít.
53. It is to be remarked that the same faulty system was adopted in similar lands in Daskroi, and if it is to be corrected in Jetalpur it nust also be corrected in the former pargana at a similar expenditure of time and cost.

$$
138-69 \text { * }
$$

54. This mode of assessing these lands was carried out according to para. 1 of the late Revenue Commissioner's (Mr. Mansfield) letter ${ }^{*}$ noted in the margin against the conviction of Mr.' Pedder and myself. The sanctiont for the change of system was not received till the 12th of April 1861, and the classification of Dàskroi was entirely revised by the end of July. 1860 and Jetalpur before the end of March 1861.

* Revence : Commissioner, N. D., to Superintendent Revenue Survey, No. 2563, dated 19th November 1860.
+ Revenue Oommissioner, N.D. letter to Saperintendent, Revenue Survey (without No.), dated 11th April 1861.

55. I am respectfully of opinion that it is now too late to correct these errors in the assessment of permanent bhátha lands in the Ahmedabad Collectorate, nor would I recommend any further interference with the assessment of Jetalpur, for notwithstanding the errors which have been pointed out, the settlement* cannot be deemed unsatisfactory.
:56. The revenue has increased $\ddagger$ and is daily in-
$\ddagger$ Since the reduction of the revised rates in 1858-59 the cultivation has increased by 13,748 $\frac{1}{8}$ mores and the revanue by Rs. 44,195-9-4, which in a small pargañ ipa large increase.
Mr. Pedder's Report on the Jamábandi of 1861.62 , para. graph 32.
creasing by waste lands being brought into gultivation; the villages are prosperous; the people cortented and gradually becoming rich; and if Government should be pleased to guarantee the presentrates of assessment it will leave nothing more to be desired.

C. J. PRESCOTT, .Superintendent, Revenue Survey and Assessment.


Revenue Survey and Assessment, Jetalpur Táluka.
No. 2353.

Bombay Castle, 22nd June 1864.
Letter from the Revenue Commissioner, N. D., No. 1160, dated 21 st April 1864Sllmitting, with his observations and opinion, a Report from the Superintendent Revenue Surver and Assessment, Gujarat, relative to the revision of the assessment of the Jetalpur Pargana of the Alhmedabad Collectorate.
Resolution.-The delay which has taken place in the submission of the Report on the revised rates of Jetalpur could not, under the circumstances, have been avoided, and it iss satisfactory that it has Paras. 4 and 21 of Revenue led to a rectification of many of the errors which had Commissioner's letter.' been committed in the original classification under the late Superintendent. Captain Prescott's Report now placed before Government evidences the care and attention which be and Mr. Pedder, the Settlement Officer, have given to the correction of former errors, and the labour this duty has imposed upos them.
2. The Governor in Council concurs with the Revenue Commissioner in considering that the assessment rates on the dry-crop lands have been pitched lower than they should have been; but, on the other hand, the water rates for rice are too high.
3. It would only delay the introduction of the revised settlement into other districts of the Northern Division to cause a revision of the rates at onee to be made, which otherwise would be the most correct course, but as there is stated to be due proportion of rice lands in every village (vide paragraph 43 of

## 138-60

Captain Prescott's Report), and as the low rates on the dry-crop lands may be fairly looked upon as balancing the high rates on the rice lands in each khata or holding, the Governor in Council is pleased to confirm the rates imposed on both these descriptions of land, and to guarantee the settlement, as suggested, until 1872-73, which, under the circumstances, is as long a period as could be sanctioned.
4. The bágaít rates on lands watered from wells, referred to in paragraphs 32 to 40 of Captain Prescott's Report, appear to have been fixed on principles which it has been found necessary to modify in subsequent settlements of other districts. The amount of revenue dependent on these rates, the Governor in Council observes, is not large, and the rates which have been fixed may therefore, as recommended, be confirmed for the short period for which the settlement is guaranteed.
5. The Report on the assessment of the bhatha lands which is promised will be awaited.

Ter Revemor Comitisoner, N: D :


No. 1987 oy. 1864.

$$
\because \quad \text { - Pooña, 29th June } 1864 .
$$

Forwarded to the" Collector of Ahmedabad for information and guidance and for commupication to the Superintendent of Survey, for whom a syare copy is appended.
2. The report called for in paragraph 5 will be awaited. It is to 'be understood that the guarantee does not extend to the bhátha lands. .
$" * \underset{\substack{\text { Be } \\ \text { Renue } \\ \text { ELLIS } \\ \text { Commissioner }}}{ }$
No. 814 or 1864.

> Ahmedabad Collector's Office, August Znd, 1864.

Copy forwarded for the information and guidance of the Superintendent, Revenue Survey and Assessment,
J. E. OLIPHANT,

Collector.

No. 706 or 1889.

## Frox

## The COLLECTOR of AHMEDABAD;

To
The SDRVEY COMMISSIONER.
Sir, " $\quad$ " Camp Pirána, 6th Marck 1889.

- I have the honour to forward the Revision Survey Report of the Daskroi Táluka prepared by the Deputy Superintendent, Mr. Fernandez.

2. It is not possible to form a very clear idea of the results of the revision upon the cultivators of the different villages, as in making a comparison between existing and proposed rates there are two elements of disturbance about which few details or statistics are given. One of them is the substitution of dry-crop rates on gardens and the other the extinction of well valuation in estimating the assessment or water-rate upon rice fields. For both of these there has been substituted a general sub-soil water-rate which is stated to bring out an average per acre of Re. 0.4-4. This is more than the difference between the maximum rates of two groups of villages, and 50 per cent. higher than the same rate in Dholka. It yields a revenue of Rs. 25,128, an increase of Rs. 5, 707 over the water share of the revenue from well irrigated lands. But what the range of this rate is, or its incidence on jiráít and rice lands respectively, is not stated. Moneover, owing to the average rates of assessment being only given for entire villages, regardless of the amount of jirdit or kyári respectively in them, and without showing what allowance is to be made for the reduction of old garden rates, and wells, the extra assessment on which bas been made a present to the owners; it is impossible without long calculations to judge how far the incidence of jiráít or kyári land assessment has increased or decreased in any particular village.
3. The following table gives the general result of the revision so far as Appendix L furnishes it:-
old.

|  | Area. | Assesement. | An $_{\text {Anoesment }}^{\text {Average }}$ |
| :---: | :---: | :---: | :---: |
|  | - Acres, | Rs, * | Rs. a. p- |
| 1. Old dry-orop -.., ... | - 77,815 | '1,63,297 | - 217 |
| 2. ${ }^{\text {2 }}$ garden ${ }^{\text {a }}$. | 6,917 | 85,373 | 522 |
| 8. \#r rice... ... | 14,881 | 86,710. | 5132 |
| T | 99,613 ${ }_{\text {a }}$ | 2,85,880 |  |
| Now. |  |  |  |
| 4. Dry-crop, inoluding old gardenAssessed for sub-soil water ... Not assessed for sub-soil water |  |  |  |
|  | 74,147 | 2,27,632 | 811 |
|  | - 8,803 | 9,232 | 2,60 |
| 6. Newrice-m |  |  |  |
| 6. Nold ricesessed for sub-soil water : | 4,966 72 | $\begin{array}{r}18,538 \\ \hline 849\end{array}$ | $\begin{array}{rl} 311 \\ 3 & 7 \\ \hline \end{array}$ |
| A. Assessed for sub-soil water ... * ... |  |  |  |
|  | 14,226 | 82,353 | 512 |
| Not assessed for sub-soil water , . ${ }^{\text {a }}$ | 262 | 1,831 |  |
| 7. Dhekudiat 8. Bhatha ... | $\begin{gathered} 1,439 \\ \hline \end{gathered}$ | 4,706 4,179 | $\begin{array}{llll}8 & 4 & 4 \\ 7 & 15 & 7\end{array}$ |
| Total | 99,439 | 3,48,220 |  |

This shows that the assessment on old rice is slightly reduced all round. Assuming that the 6,917 acres of garden has all been reduced by the difference between its former assessment Rs. 5-2-2 and the present jirsit assessment Rs. 3-1-1, i.e. by Rs. 2-1-1 an acre, a present of Rs. 14,302-5-5 per annum has been made to the owners of gardens, the amount, and more, having been distributed over the whole jiraít area, with the exception of a very small portion. New converted rice (thongh under the plea that Government never taxes improvements it is assessed far lower than the old rice) pays a rate of Rs. 3-11-8 as against a jiráit rate of Rs. 3-1-1, and therefore almost the whole burden of the enhancement of 22 per cent. and of the generosity of Government to the holders of valuable old wells and gardens (the assessment on which Colonel Prescott calculated at just twice the jiráit rate) falls upon the jirdit.
4. I ask with confidence is this just, is this fair? What would the poorer classes, who cultivate jovari and bajjri, think if they knew that the Government required an increase of land revenue, and while forgiving the owners of gardens their garden cess and the makers of new kyári their water-rate, and keeping the rate stationary on what Mr. Fernandez admits is the most valuable land, tlirew the whole of the burden on the jirait, telling them for their sole consolation that the well kasar will be remitted for the future and that they may convert jiráit into kyari if they like, and it will be assessed as kyári, but not at old kyári rates.
5. I should like to point out also that the position is scarcely logical. The theory is that improvements should not be taxed. Government, therefore, presents the garden-owning Paul with'his garden rate, charging, however, a dozen Peters next door Re. 0-4-4 an acre extra, perhaps a good deal more, to make up for it. Similarly it is proposed to assess new kyári as jirait, plus something extra for natural advantages, on the ground that "the private capital sunk by the enterprising holder of the soil " must not be taxed. Yet it continues to tax old kyari at full rates, both for land and water, though that was also made from private capital, and there is no reason to suppose it is older than many of the old gardens, while it possesses in the majority of cases no special natural advantages in excess of the new kyari.
6. Of course I do not advocate the giving up of the great revenue derived from old kyari-revenue levied according to the custom of the country and not too heavy when compared with the profits of the cultivation. Neither do I wish to raise the question of a sub-soil water assessment as against a cess on wells. W.ells, besides adding to the value of a crop in good seasons, are the salvation of crops in bad seasons and a direct safeguard against famine. There is every reason, therefore, for encouraging them. But the conversion of jirait into kyari has no such merit. The expenditure needed for it is often very small-merely the raising of a small bund. The system of taking a "small addition to the drycrop rate proportionate to the value of the natural advantages it enjoys " when worked out, gives Rs. 2 an acre less for new kyári than old. I cannot see why the natural advantages, i.e. the water and the position of the field, should not be assessed at the same rate for new kyari as for the old. If, in order to prevent its being said that Government will not tax improvements, some allowance be made for capital expended, then such expenditure should be estimated, and an attempt made to allow something for the interest on it proportionate to the share which that interest bears to the value of the whole crop. But in Daskroi at any rate, a very flat taluka, "the increase in the value of the land" of which new kyari is composed, or in "the profits of cultivating the same" (to quote Act IV of 1886), are not, as a rule, due to the improvement. They were inherent in the soil before, and, therefore, if both, old and new, be assessed alike, the anomaly of having fields, with the same natural advantages precisely, assessed at very different rates will not be perceived, and the Government will be the gainer.
7. Under any circumstances I suppose it may be considered settled that the revenue from the old kyári is to be maintained. Why, then, adopt the half-hearted policy of not making it pay its share of the general increase and of putting the whole of the enhancement on the dry crop ? Kyári is described by Mr. Fernandez to be "valuable rice-producing land", and in Daskroi it is indeed most valuable.

Just as an individual or village in the west of the district is called well-to-do according to the amount of cotton produced, so in Daskroi does wealth go hand in hand with, I might almost say depend upon, rice, To take the poor bajri and jovári crops and increase their average assessment by one-third-the maximum increase is of course far larger than that-seems most unfair. The people at any rate know it well enough, and though native-like, they will say but little openly-for the jirárít could, I have little doubt, easily pay the increase-in every chowra and at every fair, the injustice of the Sirkár will be discussed in letting off the rich Patidárs of Asláli and Báreja entirely, and taxing the poor Kolis of Chenpur: and Ránip.
8. I am not forgetting that if wells had not been left out of consideration the old rice would have shown an increase. But my complaint is that taking it all round, the kyári assessment is not raised at all, while jiraít is raised considerably. This of itself is to my mind a proof that the distribution of the sub-soil water cess has been inequitably made, that it ought to have beert much higher where rice and valuable wells are found to exist together, and much lower where wells are scarce and where there is only dry-crop cultivation.
9. It seems a matter for regret that Mr. Fernandea has said nothing of how he calculated the assessment for the rain water which falls on the kyári lands and how their "natural advantages of position" have been valued. In Colonel Prescott's reports will be found full explanation of the elaborate way in which he valued the water of each field-reports typical of the care with which minutim were in bye-gone days attended to. Mr. Fernandez does not even give a tabular statement of the water assessment of each group. Advantages on account of wells in kyári lands are now merged in the sub-soil water cess. So the rain and the position and the fertility of the soil are responsible for the rest. It would have been more satisfactory if the mode of valuation had been explained-for instance how Wasái has an average rice rate of Rs. 7-5 and Jagatpur of only Rs. 4. I would remind you that the value of a rice field in Daskroi depends mainly on two conditions: one the relative retentiveness or porosity of the soil; the other, the possibility of watering the crop as late as November. However clayey the soil may be, unless late water is to be had, only 'Sutarsall' or autumn rice can be grown, the yield of which is less and the produce of which not nearly so valuable as 'Kamod, which is selling in the

- Sarkhoj. village *at which I am writing exactly 25 per cent. higher then 'Sutarsal.' Late watering, as Colonel Prescott observed, is in Daskroi almost entirely obtained from wells, and for want of suitable sub-soil water only certain villages grow 'Kamod' extensively. The best are the following :-Wasái, Mahijda, Miroli, Timba, Naj, Giramtha, Devdi, part of Bareja, Nandej, Barejdi, Istolábád, part of Chosar and posisibly one or two others. I give below the average existing and revised assessment of the old rice lands of these villages, compared with those of a few northern villages (I omit small fractions) :-


It will be seen that there is a reduction in almost all these picked villages. : 362-56

Now take some of the villages in which rice is not the great standby and the soil admittedly not so good for growing it :-

|  |  |  | Exinting Assesament. | Revised Amescment. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Rs, a. p. | Re. an p. |
| Judal... | *** | -•• | 590 | 490 |
| Chenpur | *** | ... | $4 \begin{array}{lll}4 & 1 & 0\end{array}$ | 530 |
| Jagatpar | ... | ... | 3150 | 400 |
| Chandlodia | *** | ... | 430 | 4150 |
| Limbadia | -** | ... | 550 | 550 |
| Kanbha | *** | ... | 5880 | 520 |
| Uvarsad | *** | ... | 4110 | 490 |
| Adalaj | ... | ... | 420 | 4110 |
| Shahvadi | -• | ... | 510 | 5150 |
| Rámol | - $\cdot$ | -•• | 620 | 650 |

In some of these you will see that the assessment is raised. But what 1 want to point out specially is this, that as far as I can gather from local knowledge (for unfortunately the rice crop failed last season) a rate of Rs. 6.6 in, say, Miroli is a gnod deal lower, by comparison, than a rate of Rs. 4 in Jagatpur or Rs. 4-9 in Judal. In the first there is clayey soil and late water, and Kamod is grown extensively; the second has porous soil, and only 'Sutarsal' can be grown. The old high rates of the first-mentioned villages, no doubt, are due to the great value of the crops that are grown in them. But assuming the jirátt value of the soil to be the same-though in the grouping Judal and Jagatpur are higher than Miroli and knowing that the advantage which the kyári thus derives from wells has been given up, at any rate, almost entirely -what one would like to know is how Miroli still comes to have even so high an average assessment as Rs. 6-6 or Wasai as Rs. 7-5. The natural advantages are responsible, I presume. But how about the natural advantages of Aslali and Jetalpur, which are not Kamod-growing villages? On the present theory of working, a large portion of the 'kyari,' 'in fact all with the exception of that which is assisted by tanks, ought to have been reduced to one dead level, as it depends on impounded rain water and wells, both of which should be free, and in that case the only variation in assessment would depend on the quality of the soil and position, i.e. what are called the natural advantages, of the field.*
10. My first objection, then, to the proposed settlement is, that the general increase, inadequate as I consider it to be, is put on the wrong shoulders. The rich are let off-the poor have to pay. Every Koli with a patch of bajri is to pay sub-soil water-rate and enhanced jiraít rate in order that wealthy gardeners round Ahmedabad may be made a present of their holdings at a quit-rent, and that the great Pátidárs of the Jetalpur group may pay positively less than they do now on their rice fields. I would reverse this. Wells of course 1 would leave alone. But I would re-value and re-assess the rice; new as well as old, and make it pay a fair share of the burden. It may be said, no doubt, that it now pays enough. When Jetalpur was last settled, the verdict was, "water-

[^10]rates too high, jiráit rates too low, total result satisfactory." And satisfactory it has proved.' The rates have been paid without a murmur, or sign of difficulty. Even this year, when not a grain of rice was grown, there was no clamour for remission, though some petitions were of course presented. If an increase is justifiable at all, the rice should. pay its full share.
11. As to the relative incidence of the new dry-crop assessment in the different villages, owing to the old garden land having been amalgamated with the dry-crop, it requires calculating in each case; for Mr. Fernandez has given no details as to how much the average jirált assessment, pure and simple, works out to, and how much is added forsub-soil assessment or even what the average rate on rice is in each village. The first village is Rakhial, which at present contains the following:-

|  |  |  | Aream | Preant Ameamment. | Avarage per Acre. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Aores. | Rs. | Rs. a p. |
| Dry-orop |  | ... | 1,101 | 8,038 | 212 |
| Garden | ... | ... | 286 | 2,039 | 72. |
|  |  |  | 1,387 | 5,077 |  |
| das revise | will s | f | lows : |  |  |
| Dry-crop | ... | ... | 1,357 | 5,047 | 311 |

The result is that the village will pay less for the next 30 years than it has for the past. Yet the average enhancement on the old jirait is certainly high, very nearly a rupee an acre more, though the maximum has been only raised 8 annas. The difference, I presume, is due to the sub-soil water assessment, I am inclined to think an enhancement of $\boldsymbol{\rho}$ rupee an acre on jirait is high enough. and though I note in some others it is even higher, I have no objection to make.
12. The grouping, however, seems to me distinctly open to criticism. In the first place I note that the rich rice villages of the old Jetalpur Taluka, to which I have before alluded, have been all, or practically all, put in the 4th Class, which to my mind is distinctly wrong. If I understand the principles of our survey and settlement at all, they are that villages are to be grouped not only with reference to distance from markets and to communications, but also with reference to the state of the cultivators and the general capability of the soil to yield regular and good crops. It is on grounds like these that Gyaspur, a village situated formerly upon the river and close to Ahmedabad, has been put in the 5th Class by the Deputy Superintendent, because the former Collector Mr. Reid had particularly noticed the impoverished condition of the cultivators, who are mostly poor Kolis, and lost conisiderably by the destruction of bhátha land in the flood of 1875 . Its natural place, with reference to markets and roads, would have been in the 2nd Class. I complain, then, the converse principle has not been applied by raising sufficiently Bareja, Jetalpur and Aslali and the villages around them, where the Patidars are the wealthiest, the price of land the bighest, and the crops the richest and most to be depended upon in almost all Gujarít. The old Jetalpur villages have a railway station of their own at Barejdi and can seud produce cheaper to Bombay than the Ahmedabad group. A good made road to Naika runs through them, and one to Ahmedabad has been begun. Bareja has now 1,480 acres dry-crop for which it pays Rs. 2,794, or Re. 1-14-2 an acre. In future it will have 1,378 acres assessed at Rs. 4,117, or Rs. 2-15-9 an acre. Naroda on the Harsol road has 1,424 acres dry-crop proposed to be assessed at Rs. 5,186, or Rs. 3-10-3 an acre. Not only that, but Naroda has only 54* acres of kyári while Bareja has 1,834. Naroda is nearer to Ahmedabad, I admit; if one may judge of the sandiness of the road beside it,

- it cannot be specially fertile. I am at a loss. to judge why its jirát should pay so much more than the fortunate Bareja.

13. I venture to think that contrasts like these call for some explanation in a settlement report, but little is said except that my predecessor approved of some details of the grouping. But Mr. Reid had only a demi-official before him, in which the soil rates only were entered, and I am pretty sure that if he

[^11]were to see the result of the working out of the assessment he would find something to say to it.
14. This reminds me of another omission which I find in the report. Mr. Fernandez has given us some interesting particulars about the manufacture of cart-wheels and sáris, but beyond the usual statistics as to extension of cultivation, \&c., little or nothing about the progress of the people. Colonel Prescott in his original report on Daskroi stated briefly what the population of the different villages consists of. Nothing like it is said in the present report, though I can hardly imagine a subject which would be more worthy of investigation and more essential to a settlement report than an investigation of how the different castes had held their ground-whether any Kolis or Girássiás have shown their ability to compete with the Kunbi-how far they have become " adscripti glebo," and how far the Kunbis' land itself has passed to the money-lender, But not a word is said of this. Mr. Fernandez merely gives a statement of the number of Hindus, compared with Mabbmedans, which is of no real value. In Daskroi we have an ample thriving population of Kunbis side by side with idle Girássiás and ignorant barbarous Kolis. In classing, the land of the Koli should be valued at exactly the same standard as the land of a Kunbi. But in the grouping some allowance must be made for the circumstances of the people on the Gyaspur principle. Given two tracts of country of the same average drycrop fertility and nearness to markets, one with a wealthy, thrifty Kunbi population making great profits from the large proportion of rice land in their village, and the other Kolis with little or no rice land, no one but a pedant would assess the jovari fields of both at the same rate. He would take into consideration the advantages of the Kunbi in regard to the rice and the disadvantages of the Koli in regard to his hirth, want of education and means from which to accumulate capital, he would assess the Kolis' jovari less than the Kunbis'. If the low assessment led to the Kolis becoming rich, all the better; if to the Kunbis gradually coming in and supplanting them, none the worse, as the Kolis will then revert to their natural position as agricultural labourers. If asked what to do with a tract half Kunbis and half Kolis, I reply, that is precisely the situation in which a settlement officer must exercise his judgment.
15. I repeat that the grouping, in my humble opinion, is faulty. To place poor little places like Chandlodia and Chenpur one class above Jetalpur and Aslali and two classes above a wealthy village (not kyári) like Kuha, which is positively in the 5 th Class, to charge the Koli of Chenpur Rs. 2-14-10 for his jovári and bajri and the Pátidár of Kubadthal Rs. 2-7.1 solely on the ground of distance from Ahmedabad, is an anomaly which, in my humble opinion, no authority can justify.
16. -If it will not be thought outside my province, I should like to offer an idea as to grouping (Mr. Bulkley was good enough to consult me before, but I had then just come to the district and could give no advice). The first class distinctly is the rich group round Ahmedabad. I would fix this much as Mr. Bulkley has done, excluding Hansol, which though near camp is sandy and bad land, and adding Ghodasar, which is quite within the Ahmedabad circle. In the second I would place the Wadej group, just outside the city groupNaroda, Odhav and the whole of the great and wealthy Jetalpur group, in all 25 villages. In Class III I would put the thriving dry-crop group round Kuha, Bakrol and Kanbha, along with the poor sisters of the rich kyári group, i.e. rather poor villages with not much kyári-Bibipur, Geratnagar, Mamadpur, Vijol, Sabaspur and Laxmipur, and perhaps Timba. I would not put Ránip in 2nd Class. The railway has taken up the best part of its land, it is poor soil and has a poor class of cultivators. In No. IV I would put all the remaining dry-crop villages on the north and east, including Piplod, Kamod and Paldi Kankej, already degraded by the Deputy Superintendent below their natural position ; the three kyári villages on the Meswo would come in this group (though I am not sure they should not be bigher). Adalaj -and Uvarsad are fine villages, but I would never put them in the same category as Kuba or Kanbha, two adjacent villages which I cannot conceive the reason for separating. Chandlodia and Chenpur should also be taken out of Class III. In the V Class I would put Gyáspur and 8 poor and far distant villages, and I would

- Marked B. - have no 6th Class at all. I append a list* as I would propose them. I recently did the jamabandi of the taluka, and I have been assisted by notes kept by my Assistant Mr. Hill. So that although I have only once gone through the tilluka, yet I speak with some confidence. I ought to say that outlying villages should be put low, as being specially liable to plundering of crops by raiders from Baroda territory.

17. As for the pitch of assessment, as I have already said, I have no objection to the rates proposed. Under existing orders higher rates, though they might be paid, would lead to the 33 per cent. maximum being exceeded. But, in any case, I should hesitate before commenting on them, because, owing to alterations caused by the revisipa of the classification, if a village be raised from Rs. 4 to Rs. 4-8-0, i.e. in the proportion of 8 to 9, the resulting percentage increase will not work out to $12 \frac{1}{1}$ per cent. as one might suppose would be the case, but might come to double. I would, however, earnestly entreat Government to insist on the full 33 per cent. increase on the whole tiluka being distributed equitably over it and collected. It can eaşily bear it. Look at its enormous advantages; a magnificent local market, three railways meeting in it, prices high, and never a difficulty in collecting the present rates from the day they were imposed. Except for the order limiting the increase to 33 per cent., it might have been even more. In 1860 Mr . W. G. Pedder wrote: "Owing to the financial state of India it is desirable to assess each district as high as it will bear, that is, to fix the assessment at the pitch which will realize the largest sum for Government without checking the tendency to increased. cultivation caused by the growing demand for agricultural produce." Are these words less true now than then, with silver down to $1 s$. $4 \frac{1}{2} d$., with heavy expenses on the North.West Frontier and in Burmah, with the cotton duties gone, our opium going, our administration daily becoming more complex and expensive, while the demand for the, rayat's cotton and wheat is incomparably greater and the Suez Canal has cheapened and quickened the transit to Europe? What is to be feared is that Government may not be able to adhere to this limit, or else that the rayat will eventually see separate cesses imposed for police, for sanitation and other objects-a measure which will be more unpopular and which the rayat will consider a greater breach of faith than if Government now taxed him in the way to which he is accustomed.
18. But $I$ fear $I$ am outstepping iny limits both of argument and of your time. I agree with the proposals about bhítha and dhekudiat lands. There may be some mistake as to the number of horses (484) in the taluka, and I will enquire about it. But the country has not yet quite recovered from the wholesale deportation of its animal for transport in the Afgbán war, and good ponies and horses are exported for polo or racing or for the cavalry at Baroda, as soon as they are fit for work. So the figure is possibly correct. Still I should suppose the Mukhis and Pátidárs of between 30 and 40 villages are very fond of breeding, aud turn out capital stock: so there are no grounds fon Mr. Fernandez's disappointment.
19. There is one proposal more to which I must offer opposition, that is, to give away the Government trees, which are said to bring in a revenue of Rs. 2,736 a year, to the permanent holders of the land in which they stand. The land in many cases has passed over and over again into different hands since the trees were planted, and to give away the trees seems as wise a proposition as to give the Welsh farmers the tithe. Is Government so well off that it can afford to throw away Rs. 2,7.36 a year? If the moriey is to be spared, I could easily name a dozen urgent wants which would swallow it up half a dozen times. The history of the trees is this. Many years ago Sir B. Ellis decided to sell the trees to the cultivators at a moderate price. But the people of Rakhial which adjoins Ahmedabad and of a few other villages would not take them. So now when they are much more valuable, it is proposed positively to give them away. The Rakhial trees are the most numerous and important, ąud have been carefully protected since. At the present day the destruction of timber by all but Patidírs, and its sale to the mills for fremood, is lamentable to a lover of trees. This beautiful park-like country, which all writers from Mountstuart Elphinstone downwards have so much admired, is in dauger of being stripped: At

B 362-37

Watwa, near Ahmedadad, the Inámdár and his relatives have cut down nearly 1,000 fine trees in the last two or three years-and every day trains of carts laden with wood (not merely bábul, but tamarind, nim and even mango) are to be seen at the city gates. For the sake of the city I would beg that the beautiful Rakhiál groves may be spared : to destroy them would be vandalism. If Government wants to part with them, let the right of gathering the fruit only be sold. It will fetch a very large sum, Rs. 10,000 or Rs. 12,000, I expect, in Rakhial alone, the condition being made that all dead wood is reserved by Government. This is a seignorial right well known in Gujarat*, but I would rather leave the trees as they are. The benevolence of Government should have some limits. Or, if the trees must be made over free, let it be on condition that they are not cut down without sanction. $\dagger$

# I have the honour to be, <br> Sir, <br> Your most obedient Servant, <br> H. E. M. JAMES, 

Collector.

[^12]A.

Statement showing the different grades of Kyari Land in 3 Villages of Daskroi and the Aereage under different kinds of Rice, according to the people's account.

H. E. M. JSMES,

Collector.
B.

Statcment showing suggested groups of villages of the Daskroi Tailuka : vide paragraph 16 of Collector's No. 706, dated Cth March 1889.

| Clase L . | Class II. | Clase IIL. | Clase iv. | Clases V. |
| :---: | :---: | :---: | :---: | :---: |
| 1. Rakhili. <br> 2. Danilimda. <br> 3. Bagfardos. <br> 4. Khokbra Mohemdabad <br> 6. Berampur. <br> 6. Sheher Kotra. <br> 7. Rajpur-Hirpar. <br> 8. Aspur-Surpar. <br> 9. Dariápar Kazipar. <br> 10. Asarva. <br> 12. Hansol. <br> 13. Shekhpar Khánpur. <br> 14. Changispur. <br> 15. Chadavad. <br> 16. Paldi Kochráb. <br> 17. Fatepur. <br> 18. Maktanopar. <br> 19. Kochráb <br> 20. Ghodísar. <br> 21. Nadicka. | 1. Whilaj. <br> 2. Acher. <br> 3. Mutera. <br> 4. Usmanpur. <br> 6. Odhav. <br> 7. Naroda. <br> 8. Káli. <br> 9. Ode. <br> 10. Lambha <br> 11. Asslali. <br> 12. Jetalpur. <br> 13. Barcja. <br> 14. Naj. <br> 15. Giramtha. <br> 16. Wabai. <br> 17. Mahijda. <br> 18. Miroli. <br> 19. Barejdi. <br> 20. Nandej. <br> 22. Geratpur. <br> 23. Gámdí. <br> 24. Deodi. <br> 25. Istolabad. | 1. Hirapur. <br> 2. Badocira. <br> 3. Hathijan. <br> 4. Vijol <br> 5. Bibipur <br> 6. Geratuagar. <br> 7. Momarlpur. <br> 8. Bah mal. <br> 9. Gatrid <br> 10. Dhamatván. <br> 11. Kanbla. <br> 12. Bhuvaldi. <br> 13. Kubadthal <br> 14. Kuha. <br> 15. Bhat. <br> 16. Ranip. <br> 17. Gihantlodia. <br> 18. Vastrápur. <br> 19. Ramol <br> 20. Sigarva <br> 21. Chandkheda <br> 22. Gote <br> 23. Sahijpur.. <br> 24, Laxmipur. <br> 25. Timba. | 1. Chandlodia. <br> 2. Cheupur. <br> 3. Hauspara. 4. Kotarpur. <br> 5. Jagatpur. <br> 6. Tragad. <br> 7. Judal. <br> 8. Khoraj. <br> 10. Kharodiar. <br> 11. Dantali. <br> 12. Jamietpur: <br> 13. Ardalaj. <br> 14. Uvirand. <br> 15. Tarapur. <br> 16. Por. <br> 18. Sughad. <br> 19. Indroda. <br> 20. Dholákuhs. <br> 21. Ráesan. <br> 22. Koba <br> 23. Walad. 24. Karai. <br> 25. Chiloda. <br> 27. Limbádia. <br> 28. Medra. <br> 29. Euásan. <br> 30. Riepur. 31. Pardhol. <br> 32. Vehelal. <br> 33. Huka. <br> 35. Lalpur. <br> 36. Pasuj. <br> 37. Amiápur. <br> 38. Paldi Kankoj. <br> 39. Kamod. <br> 40. Piplod. <br> 41. Harniav. <br> 42. Undrel: 43. Bhuva. <br> 43. Bhuval. | 1. Sabbappur. <br> 3. Namanabad <br> 4. Nava pura. <br> 5. Warod. <br> 6. Sanoda. <br> 7 Lijapur. <br> 8. Lalikaman. <br> 9. Gyâopur. |

H. E. M. JAMES,

Collector.

No. 755 or 1889.

## From

Tae Honovrable T. H. STEWART, Survey and Settlement Commissioner ; To

The CHIEF SECRETARY to GOVERNMENT, Revenue Department.<br>Camp Mahábaleshvar, 16th April 1889.

## Sir,

I have the honour to forward proposals for the revision settlement of 123 villages now included in the Daskroi Taluka of the Ahmedabad Collectorate. Since the original settlement in $1860-61$ the number of villages comprised in this taluka has been considerably modified by transfers and amalgamations, the chief alteration being made in 1867, when 29 villages of the old Jetalpur Táluka, comprising one of the richest rice-growing tracts in the Ahmedabad district, were added to its limits.
2. The proposals for the survey settlement of the Daskroi Taluka were prepared by Captain Prescott, Superintendent, Gujarát Revenue Survey, and forwarded through the Collector of Ahmedabad, Mr. A. Rogers, at the end of 1860. The proposed rates appear to have been introduced experimentally with the sanction of the Revenue Commissioner, Mr. Mansfield, in 1861, but no steps were taken to have their continuance guaranteed by Government until his successor, Mr. Ellis, took up the matter in 1864. In the intervening time, correspondence had taken place on several matters connected with the settlement, and steps had been taken to verify the correctness of the field operations, which at the start appear to have been somewhat mismanaged. Finally, by Government Resolution No. 3291, dated 29th August 1864, the rates, which were considered by Mr. Ellis to be "sufficiently correct to warrant their confirmation," were guaranteed till the close of 1886-87.
3. A parusal of the correspondence at the original settlement of this taluka and also that of the old Jetalpur sub-division, which immediately preceded it, will be found very interesting as showing the efforts made during this period to improve the classification of rice and alluvial or bhátha lands, and to bring the assessment of areas watered from wells and " dhekudis" under a system more easily workable and less open to fraud. We owe it to the successful initiative of Captain Prescott and Mr. Pedder in these settlements that we have a classification of soils in Daskroi upon which we have been able to rely greatly in revision, and that little has remained to be done but to give effect to the new policy of sub-soil water classification by which " kasar" and other imposts on irrigation by wells, whether pucka or kutcha, disappear in favour of a general addition to the assessment of all lands which have ready facilities for irrigation from usable sub-soil water, whether such facilities have been brought into use or have been allowed to lie dormant.
4. The knowledge that great labour was expended at the early settlement in making both measurement and classification as accurate as possible, has enabled us to reduce field operations in revision to little more than a test of the original work. The measurement work in 117 villages out of 123 was found capable of confirmation, while in the remaining 6 villages only the work was more or less re-done. Revision operations consisted, for the most part, in the separation of recognized occupancies as required by the rules. The result of the test of the old soil classification was that in 111 villages it was accepted as too good to call for interference, whiletin 7 villages it was thought necessary to re-classify on the
more recently accepted standards. In the remaining 5 villages re-classification, in whole or in part, was rendered inevitable for reasons stated in paragraph 7 of the report. The only general operation carried on throughout was that of sub-soil water classification, in which the principles sanctioned by Government for the re-settlement of the Jhálod andj Dholka Talukas were strictly followed. It is a matter of congratulation that in the case of jiraít the soil classification, and in the case of "kyári" the soil classification as well as that of rain-water and tank assistance has called for no material amendment. In bhátha lands re-classification has been necessary owing to the disastrous floods of the Sábarmati River, which not only swept away much of the land so classed, but did general damage by deposit of coarse sand-drift. Dhekudiat lands have been classed for sub-soil water advantages in common with all lands possessing such advantages, but in their assessment we have been guided by the orders contained in paragraph 6 of Government Resolution No. 796, dated 3rd February 1888.
5. It is very necessary in revising the settlement of this tract to understand clearly the intentions upon which the early settlement officers proceeded. In Dholka and the earlier settled villages of the Ahmedabad Collectorate the survey rates were pitched confessedly low with a view to encouraging the occupation of waste lands and giving proof of the liberal views upon which the survey system was founded. But a perusal of the correspondence proceeding at the time convinces me that while the lavish reduction of rates was abandoned at an early date, the necessity for reduction of tazation as a concomitant of survey settlement had come to be rejected as early as the settlement of the Jetalpur Táluka, which immediately preceded Daskroi, while in Daskroi itself the efforts of the settlement officers were directed to obtain for Government that fair share of the produce of the land which experience and tradition have led the Survey Department to adopt as the proper measure of the Government demand.
6. If there is any doubt as to the correctness of this opinion it will be set at rest by referring to paragraph 44 of Captain Prescott's report, No. 128 of 14 th December 1860, in which he says: "I am bound to consider the imperative necessity which exists to raise as much revenue as possible, and I must therefore fix my maximum rates not so much with a view of producing effects, however otherwise desirable, as of assessing the pargana as highly as it will bear." A more convincing proof of the altered views then existing is to be found in the attitude of Mr. A. Rogers through whose hands the Daskroi proposals passed, and who minuted on them in his No. 1271 of 27 th idem. In that memorandum Mr. Rogers, whose settlements in Dholka and Dhandhuka prior to 1858 had been generally held to have caused undue loss to Government, not only disapproved of an inclination displayed by Captain Prescott to lower his proposed rates by 4 annas all round on the ground of uncertainty of prices, but insisted on a very material increase of rates beyond the standard which Captain Prescott had hesitatingly recommended. Neither of these officers were blind to the vast improvement which was impending in the completion of railway communication between Bombay and Ahmedabad. While Captain Prescott alluded to that event as likely considerably to increase the value of land in Daskroi, Mr. Rogers, by whom the rates as finally accepted were recommended, fully recognized and aeted upon it in the following clear terms: "Probably within three years Ahmedabad will be the terminus of the railway connecting Gujarat with Bombay, and land in the villages immediately surrounding it will of course become more proportionately valuable as compared with that of those at a greater distance than it is even now, in consequence of the proximity of the Ahmedabad market. As it is, the value of land capable of producing the commonest cereals-jovári and bájri-becomes more valuable every half mile it approaches the town, in consequence of the increased facility for the sale of the karab or stalks, for which there is an enormous demand as fodder for cattle. I propose, therefore, to fix the maximum rate for the villages immediately surrounding Ahmedabad and the railway terminus at Rs. 3-12 and, keeping the same number of classes as that proposed by the Superintendent, to reduce the maximum of each class according to its distance from that centre by 4 annas, so as to bring the lowest to Rs. 2-8-0 instead of Rs. 2-4-0."
7. While, therefore, it may be said that the advantages of railway communication with Bombay have been more or less discounted at the first settlement, the many improvements by which that communication has been amplified and extended in subsequent years, specified in paragraph 22 of Mr. Fernandez's report could not have been foreseen or taken into account. After thirty years we find railway communication opened not only with Bombay but with the North-West Provinces, the Panjab and Káthiáwar, while four feeder roads have been constructed, bringing the advantages of railway communication within the reach of the outlying villages of the táluka.
8. In considering how far we are justified in enhancing the rates of assessment in this revision, it is most important to arrive at some clear idea as to how far the rise in prices, which was very marked at the time of the settlement of Daskroi, has been taken into consideration in fixing the pitch of the rates. Appendix J to Mr. Fernandez's report shows that the settlement took place on the eve of an entire revolution in the values of the chief products of the soil, while from paragraph 40 of his report it appears that in the seven years following the settlement, prices had reached a level about double as high as that which had prevailed in the seven years preceding, and that that level has been fairly maintained notwithstanding temporary oscillations during the remaining years of the survey guarantee. Writing in December 1860 (vide paragraph, 42 of his No. 128 of that year) it is clear that Captain Prescott was puzzled to account for the great variations in prices which had occurred and were still occurring, and allowed himself to be bat little swayed by the consideration of existing inflated prices in fruming his proposals. Mr. Rogers, on the other hand, writing only a few days later was more confident as to the reasons which had tended to raise prices, and more certain of the continuance of the improved values. His ideas on the subject are expressed in paragraph 28 of his letter No. 1271 of 27th December 1860, in which he says :-
"I can see no adequate reason for entertaining the suggestion made in Captain Prescott's 43 rd paragraph to lower the rates of assessment he has proposed by 4 annas all round. The figures given in his 48th paragraph show that his proposals would give an average reduction of above 5 annas 10 pies an acre on dry-crop soils throughout the district, for which in consideration of the ruling high prices of agricultural prodace of late years I can see no necessity. The opening up of communication with Bombay by rail will tend to keep up prices, which, having evidently risen in consequence of the immense inflax of silver into the country and the development of native industry in numberless ways, will not fall to any great extent until the latter becomes slack or the flow of the precious metal to the East is stopped. As matters now stand, there does not appear much probability of the latter event, and there is scaroely a possibility of the former."
9. It may fairly be inferred, therefore, that Mr. Rogers, who was an exceedingly cautious settlement officer, considered the amended rates he proposed as suitable to prices ranging somewhat between the exceedingly low prices which prevailed in the period antecedent to 1856-57 and the improved prices which were current when he wrote. Even if we take the three years 1857-58 to 1859-60 and compare their prices with the prices ruling during the last decade of the lease we find the following result :-

|  | Meagurbd Stes of 40 Tolús baut Rupre. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Bajxi. | Rice in huak. | Wheat. | Jovári. |
| 1857-58 to 1859-60 ... ... | 47 | 73 | 43 | 55 |
| 1878-78 to 1887-88 ... | 34 | 32 | 25 | 38 |

It is clear, therefore, that, even if we accept Mr. Rogers' assessments as having been based on the highest range of prices which he could possibly have assumed, present prices show an improvement of some 40 per cent. in the common cereals, while in rice and wheat the improvement is still more marked. Seeing, moreover, that the figures quoted by Mr. Fernandez to illustrate the
progress of the táluka in wealth and resources show unmistakeably that the rates of the original survey have been successful in all particulars, and that the usual revenue history and statistics of collection point to a Government demand collected punctually and regularly with a remarkable absence of coercive process, we may fairly proceed to enhance the rates within the reasonable limits prescribed by Government.
10. Taking all circumstances into consideration, I cannot think that the enhancement of Rs. 62,842, or 22 per cent., which Mr. Fernandez with the advice of Mr. Bulkley proposes for this taluka, with a further addition of Rs. 3,994 raising the total to Rs. 66,836 , or by $23 \frac{1}{2}$ per cent., which I am about to propose, is likely to be seriously objected to. It is more likely that not fully understanding the complications attendant on the altered principles of taxation of sub-soil water, the critic of this settlement may be induced to consider the proposed enhancement as too moderate and to favour the conclusion come to by Mr. James, the Collector of Ahmedabad, that the táluka should be made to bear the utmost burden of enhancement which the limits prescribed by Government will allow.
11. Before coming to the question of the pitch of the revised rates $I$ think it right to notice briefly the objections taken by the Acting Collector, Mr. James, to certain points in the revision scheme for this taluka which really form part and parcel of our revision policy in Gujarát. I might fairly take my stand entirely on the revision papers for the Dholka Taluka, in which precisely similar proposals made by the late Deputy Superintendent, Mr. Bulkley, were, after approval expressed by the Collector, Mr. Reid, and the Commissioner, N. D., finally sanctioned by Government in 1888. But ás I had no opportunity of expressing my own views on that settlement, and as Mr. James' present doubts and objections are of a kind which, if unreplied to, may be expected to be urged by critics in the future, I am glad of the opportunity to show that not only is our position perfectly fair, just and logical, but that with the minimum risk of error we are introducing a system which will stimulate the most raluable form of agricultural improvement and at the same time relieve the revenue administration of an intricate system of well taxation which has long been a fruitful source of confusion and controversy in Gujarat.
12. From paragraph 2 of Mr. James' report it,would appear that he has been led into error by not understanding at the outset how the assessment of sub-soil water advantages has been arrived at. Because the average addition to the assessment of lands possessing facilities for irrigation from sub-soil water in the Dholka Taluka was 2 annas 10 pies and in the Daskroi Taluka the average incidence is 4 annas 4 pies, 'Mr. James has evidently jumped at the conclusion that the valuation of sub-soil water in Daskroi as an element of productiveness has been higher than in Dholka. But on the contrary it has been lower: so low indeed that any further lowering would be unreasonable. The addition to the soil valuation which is made on account of sub-soil water advantages is made in the form of classification annas which are converted into a cash addition when applied to the maximum rates. The whole system has been clearly explained and approved by Government in their Resolution No. 6342, dated 6th August 1885. Appended to the rules therein sanctioned was a relative valuation scale which was intended to be a guide in future settlement proposals. The actual values of the several classes of sub-soil water are arranged by the settlement officers according to the prevailing orders of water whether sweet or brackish or salt and the relative depths of water coming under each order. Appendices A and B to this report give the actual values applied to Dholka and Daskroi respectively and will show that the best and most readily utilizable advantages in Dholka have been classed at 2 annas, while in Daskroi the equivalent advantages bear a classification valuation of 1 anna 6 pies only. To make my meaning clear, 1 st class soil in Dholka carrying a maximum rate of Rs. 2 would bear an addition of 4 annas if possessed of 1st class sub-soil water advantages, whereas similar soil if rated on a maximum of Rs. 2 in Daskroi and possessed of the same sub-soil water advantages would take an additional assessment of 3 annas only. The only reason why the average addition for sub-soil water in Daskroi exceeds that of Dholka, is that the maximum rates for the former are much higher than for the latter, the maxima in Dholka being
from Rs. 2-8.0 downwards, while in Daskroi the rates are graduated from a maximum of Rs. 4-4-0.
13. It is important in considering the incidence of the sub-soil water classification in Daskroi to bear in mind that the great advantage of utilizable sub-soil water of all degrees of excellence and at all depths believed to be fairly workable is contained within the limited compass of 1 anna 6 pies, or $\frac{s}{4}$ th of a class in the ordinary classification scale, and that the anna-valuation descends from 1 anna 6 pies down to 3 pies, which represents the lowest assessable advantage. The presence in the soil of a field of a little extra sand or a fewd nodules of lime would be held bya our classing rules to reduce the classification valuation of that field by one class or 2 annas, so that when the presence of the treasure of sweet water within 15 to 20 feet of the surface with every facility for digging a well is met by an increase of classification of less than 2 annas, we may fairly claim to have fulfilled our promise and to have got rid of special taxation of well irrigation by a small addition to the classification of all soils which possess the required sub-soil water facilities.
14. The clearing up, once for all, of this point will, I think, throw light on many of Mr. James' doubts and objections. His constant reference to the whole burden of the relief given to the owners of wells "being tbrown on the jirát" (paragraph 4) and to the "letting off of the rich Pátidárs entirely and taxing the poor Kolis" (paragraph 7) makes me think that he has not appreciated the fact that the addition of assessment on account of sub-soil water has been made on every acre of land with whatsoever crop growing on it which has water of a certain quality reachable at a certain distance from the surface. It is no matter whether it is "bajri" or "jovári" land belonging to a poor Koli or cotton and wheat land belonging to a rich Patidár, nor does it signify in the least degree whether it is rice land bearing "kamod" rice or garden land bearing sugarcane or the best orchard produce. A strange misapprehension on this head pervades the first 8 paragraphs of Mr. James' report-vide paragraph 8 for instance. Because old kyari land is not raised at all (a very probable circumstance considering that well "himayat" has been removed from its assessment) and because jirait is raised considerably, it is considered proved that the distribution of the sub-soil water cess has been inequitably made. But when it is known that the classification of each plot of land for its sub-soil water facilities has been made in the field on its own merits and under rules sanctioned by Government, and that it forms an integral part of the soil classification, the idea of inequality of distri-. bution falls to the ground. Lands are assessed for their advantages of sub-soil irrigation independently of the fact whether they are or are not utilized at present: and to assess the facility higher where the people in the neighbourhood have largely used it, and lower where it has been allowed to lie dormant, as recommended by Mr. James in his 8th paragraph, is contrary to the principle upon which we have proceeded from the first, viz., that the possession of the facility is the advantage to be taxed and not its utilization. Again, if bájri and jovári land bears its share of the abandoned well rates, it does so in proportion to its general prductiveness, and if such land belongs to a poor Koli its productiveness is likely to be so small compared with that of the low-lying deep soils of the rich Pätidár that, if it is assessed at all for sub-soil water, the average addition to its assessment. is far more likely to be 1 anna 4 pies than 4 annas 4 pies.
15. It will be advisable perhaps, to avoid further misapprehension, to state clearly how garden and rice lands have been dealt with in revising this settlement. Garden lands watered from wells have of course had all assessment due to taxation of wells struck off and a sub-soil water rate substituted. Although undoubtedly owners of wells benefit greatly by this arrangement and have a present made to them of the difference between their existing garden rate and the resulting assessment from the new sub-soil water classification, the deliberate intention of Government that this should be tbe case is at the root of the whole change of system. When we became bound by law to exempt from assessment. new wells constructed with the labour and capital of the occupant of the land, we continued as a matter of course to tax with the usual forms of taxation those wells which had been constructed before the improvement policy of Government had been declared. This produced loud complaints in the press and elsewhere,

[^13]that while recent well construction received immunity from taxation, the " pioneers of the well industry," who had constructed wells before the survey settlement in the face of many difficulties and discouragements, continued to be heavily taxed. It was in reply to this complaint, which was felt to have some weight, that Government revived a scheme, which had found favour as far back as the time of Sir Barrow Ellis and had been more recently advocated by Mr. G. F. Sheppard, by which "the garden-owning Paul," as Mr. James calls the well owner, might be relieved of the overwhelming tax imposed upon him in return for his enterprise in bringing the water to the surface, while the immediate loss to Government might be recouped by attaching a small assessment not only to the jiriait lands of the neighbouring "Peters" who possess the natural advantage of sub-soil water without utilizing it, but by assessing also the natural advantage of the lands of ".the Pauls" themselves. Wells in Gujarat are by no means permanent : if they do not fall in altogether in the course of a generation they usually require extensive repairs; and if the well from which a garden is irrigated falls to ruin, the land will simply go back to its dry-crop position with its natural sub-soil advantages recognized, but lying dormant until they are again utilized.
16. The same principles govern "kyari" land whether old or new. If old "kyari" has well assistance, the classification annas representing that assistance are taken off, and a classification representing the value of the sub-soil water advantage is substituted. New "kyari" is classed as dry-crop only with two or three classes added, as the case may be, in the shape of "goons" for advantages of position and facility of conversion. If declared to have assessable sub-soil water facilities, the classification thereof will be added to the dry-crop soil classification, but not an anna more will be levied from the occupant it he were to supplement the irrigational advantages of the land by a dozen wells.
17. While distinctly advocating the retention of the present system under which old "kyari" lands are fully assessed to the revenue, Mr. James is of opinion that we follow a half-hearted policy in not fully assessing new "kyári" also, which has been turned into rice by utilizing the same natural advantages of position and at an expenditure which he characterizes as small. In fact, Mr. James' recommendation amounts to the ignoring altogether of the conversion of dry-crop land into rice as an improvement coming under the protection of the law, although Government from the earliest days have admitted it to be so and have dealt delicately, with it in consequence. In the Deccan and Southern Maratha Country revision surveys the assessment of new rice has been brought within the rating of the best dry-crop land, thus letting the occupant realize full profits from his enterprise in utilizing the natural facilities of the land by throwing up embankments to impound the rainfall and by deepening the rice beds to augment the supply of standing water, which are operations of a more or less expensive nature attending the conversion of land into rice in all parts of the Presidency. In more recent settlements in the Konkan an attempt has been made to assess with some greater degree of accuracy the value of the natural advantages inherent in the soil which have rendered its conversion into rice possible and profitable, but in those settlements also the necessity of specially rewarding enterprise and tempting the agriculturists to further improvements of the kind has ended in Government leaving the cultivator of newly made rice in possession of an overwhelming share of the profits of the caltivation. In Gujarit more than in any part of the Presidency we hare recognized in oun rules the possibility of guaging the natural advantages which have facilitated the conversion of the land into rice, but yet the average assessment of new rice in this settlement is less than the average assessment of old rice by more than Rs. 2 per acre. Any endeavour to make a nice calculation of the capital actually expended in the conversion of the land so as to allow something for the interest on it proportionate to the share that interest bears to the value of the whole crop, would be unsuccessful and useless. To make an estimate of the kind for each new rice bed or each addition to an old rice bed would involve intricate enquiries which we are not in a position to undertake. In the absence of detailed and trustworthy accounts supplied by the improvers themselves and without any means of judging how great was the expenditure on each of the different operations, some of which may have been gradually carried out by the persevering labour of the occupant, the only safe plan is to adopt a standard of rating which will
allow a wide margin for all contingencies and thereby leave buit little chance of the labour and capital of the occupant being subjected to taxation.
18. I understand Mr. James to be opposed to any reduction of the assessment on old "kyari" lands which forms so large a part of the Government revenue in the Daskroi Taluka; but he has raised a question as to why, if garden lands are excused their well taxation on the ground of the improvement which has made their conversion into garden possible, old " kyári" lands should be assessed at rates higher than the ordinary dry-crop, seeing that their rice-producing, capabilities have been also the result of the expenditure of labour and capital. The answer is very simple. Neisher in the case of wells constructed previous to the survey, nor of rice lands existing at that time, is Government either by law or declaration of policy called upon to abate any portion of the revenue they have been in the tabit of enjoying. In the case of lands irrigated by wells, Government have thought it expedient to abandon the special revenue, having found a most just and felicitous means of recouping the lass; bat in the case of old rice lands, Government have not chosen to decree the abandonment of the very substantial revenue from the higher form of cultivation for which there is no possible substitute. There is another reason why the remission of old "kyári" assessment would be a wanton abandonment of revenue. The majority of the old rice lands of the Ahmedabad district have to all appearances existed from byegone days, and since the improvement was made may have changed hands over and over again in the periods of famine, war and pestilence which have passed over the district. In nine cases out of ten it would be impossible to prove that the old "kyari" was not laid out for riee some cen* turies ago, whereas in the case of well-watered lands the well must have been more or less a recent improvement, and in nine cases out of ten it would be safe to assume that the present occupant is the descendant or representative of the builder thereof, and that the benefit of the remission does not go far astray.
19. I now turn to the proposals for the revision of the grouping and rating which were matured with the greatest care by the late Deputy Superintendent, and which Mr. Fernandez has allowed Mr. Bulkley to explain in his own words (vide paragraphs 47 to 52). Not content with his own unequalled experience of the district, Mr. Bulkley has sought advice from all competent advisers and, in conformity with my expressed instructions to the Settlement Officers under me, has taken the Collector of the district into his confidence in preparing his scheme. Mr. Reid, the late Collector, seems to have approved Mr. Bulkley's views ; but Mr. James, the present head of the district, has practically worked out a plan of his own which he recommends in substitution. I have gone over both achemes with Mr. Fernandez during a recent visit to the Ahmedabad district, and though agreeing generally with Mr. Bulkley have endeavoured to adopt such portions of Mr. James' recommendations as may be incorporated with the scheme without danger of imperilling its success.
20. It must not be forgotten that in this settlement there are many disturbing elements to be dealt with, chief of which is the abandonment of well revenue and the substitution of sub-soil water assessment. A great deal of intricate calculation is demanded requiring much care and forethought on the part of the professional advisers of Government. Before we can decide upon the proper dry-crop rating of a group of villages we have not only to ascertain what changes have been made in the old classification of soils, but we have to be careful that as the tendency of our new system of sub-soil water taxation is to increase the burden of the dry-crop share of the assessments of those lands which possess atilizable natural advantages, we do not by too rapid a rise in the ordinary maximum rates put too sudden and heavy an increase on those lands which are dependent solely on dry-crop produce. We have, moreover, to consider closely the character of the cultivation in each group and the general quality of the sub-soil water. Under these circumstances a great responsibility rests on the settlement officers which they cannot share even with the revenue officers of the district, but of which they themselives must bear the entire brunt. In the case of Daskroi, therefore, I strongly recommend Government to be guided by professional opinion. I have no objection to alter Mr. Bulkley's scheme in the direction of Mr. James'
recommendations by adding the village of Ghodasur to the 1st class and placing

1. Sahijpur.
2. Larmipura
3. Lámbha,
4. Od
5. Giramtha,
6. Miroli.
7. Timbe
8. Wasti.
9. Mahijda
10. Bareja.
11. Naj
12. Jetalpur.
13. Aslali.
14. Gamdi.
15. Chobar.
16. Istolábád,
17. Devdi.

18, Geratpur.
19. Bárejdi.
20. Nandej. the 20 villages of the old Jetalpur Taluka, noted in the margin, in the third group on a maximum. dry-crop rate of Rs. 3-12-0. I cannot, however, recommend Government to go so far as to place these villages in the second group, as although they are rich villages they owe their wealth and prosperity rather to the thrift and energy of their cultivators than to any aooident of position or increased facilities of communication. They are not partioularly benefitted by the new road to Barejari Station, as I ascertained by enquiry on the spot, and as a good deal of assessment has been struck off from the Government demand on the old kyári on account of well assistance, their jiraít lands, which are by no means of a superior kind, would be liable to be unduly and dangerously burdened if Mr. James' recommendations were carried out in full.
21. With the exception of these few alterations I recommend that the dry. crop rates should remain as proposed by Messrs. Bulkley and Fernanden, who have very wisely retained the old number of groups and the old system of group. ing where there is no great reason for altering it. Ahmedabad is now, as it was at the early settlement, the great market by proximity to which we must more ' or less be guided in weighing the advantages of the several villages. And as the assessment of the $d^{4} y$-crop lands. in Daskroi cannot be charged with undue leniency from the beginning, I think that the advance in maximum rates of the various groups which Mr. Bulkley proposes is sufficient to mark the improvement in prices and in other respects which the statistios produced at this settlement indubitably show.

22, The proposed rates for the water advantages of rice lands have been prepared by Mr. Bulkley with equal care and precision and have been approved by me in each instance. The old water rates in the Jetalpur villages were described as high at the first settlement, while those of Daskroi were by no means lenient : hence I have approved material increase of the rate in the case of a few villages only, the enhancements in the remainder being either triffing in themselves or designed to produce an even maximum rate on which the field assessments can be more readily and conveniently worked out. In only 2 villages close to Ahmedabad has the increase of water-rate been as high as Re. 1. The results of the proposals under this head will be to equalize rather than to enhance. Indeed, owing to the remission of the assessment for well assistance which formed part of the Government demand, the average rate for old rice land comes out slightly less than that under the expired settlement, notwithstanding the raising of the rates for soil and water and the addition to the assessment due to the valuation of sub-siil water.
23. The rates proposed for bhátia and dhekudiatlands have been explained by Mr. Fernandez in his paragraphs 55 to 60 , and as they meet with the approval of the Collector I need not dwell further on them. The average rate of the bhátha lands, which amount altogether to 524 acres, will be Rs. $7-15-7$ per acre, while the average rate of the 1,439 acres, which possess "dhekudiat" advautages, will be Rs. 3-4-4.
24. I have not dwelt at any great length on the details of Mr. James' recommendations for re-grouping the villages of this taluka, because it seems to me that they are founded to a great extent on principles which have had no place in our settlement system for many years past. No doubt where very great differences exist between the standards of husbandry prevailing in different parts of a tract under settlement, and the attainment of an equal standard is for certain reasons impossible, we are authorized by the Joint Report system to make some slight differentiation in the maximum rates on that account; but I do not think we are justified in making such distinctions simply because one vitlage is inhabited chiefly by Kolis, while another has a large complement of Pátidars or Kunbis. In villages surrounding and within easy reach
of a large city like Ahmedabad there can be no secrets of husbandry known to the Pátidár which are beyond the comprehension of the Koli cultivator. If the husbandry of the Koli is not on a par with that of the Pátidár it is not due so much to want of opportunity of learning and practising, but to the innate thriftlessness of the class which is notorious for laziness and want of enterprise: If the rich old Jetalpur villages of this settlement had been cultivated all these years by Kolis their condition at this day, from an agricultural point of view, would have been very different. But to charge a Koli in a village at the gatss of Ahnedabad a smaller rate for the occupation of his land than the Pátidar, would be simply. giving him alms from the Imperial treasury which would perpetuate his degradation rather than advance his position as an agriculturist. I am quite unable to agree with all Mr. James' recommendations which are founded upon distinctions of this sort which are more akin to caste or class" bighoti" than any which have been suggested to me for years past. The case of Gyaspur is altogether exceptional, and our treatment of the village in this revision cannot be quoted as a precedent:
25. Again Mr. James' recommendations are subject to the objection which I brought prominently to notice in criticising the amendments he suggested in the proposals for the revision of the Dhandhuka rates, viz., that he has not considered the financial results which are already produced by Mr. Bulkley's proposals before suggesting his further large enbancements of the maxima. His recommendations about Kuha and its surrounding villages are principally based on the fact that the cultivators are Kunbis; but if his recommendation were to be accepted and the village maximum rate raised from Rs. $3-4-0$, as recommended by Mr. Bulkley, to Rs. 3-12-0, there would be a further large enhancement over the increase of 454 per cent. which Mr. Bulkley's proposals themselves produce. The same results would ensue in other instances. It is possible that very large enhancements of this kind may be paid without murmur; but the suddenness of such increases is in the nature of a penalty, which according to Mr. James' project will fall on the class which has deserved best of the State and on tenants who have proved the most faithful stewards of the interests of Government. It must be also remembered that although certain villages are generally known as "Kunbi villages" or "Pátidár villages" there are few cases in which they are without a mixture of Koli, Mahomedan or low-caste cultivators, and the same maximum as is applied to the wealthy majority will be applied to the poor minority in a way which may well prove to them a crushing burden.


#### Abstract

26. Mr. James has not fully realized the fact that in working out the assessments of villages we are guided by fixed principles and our calculations solely depend on the recorded results of the field operations and their application to the prescribed standards of rating. We cąnnot go beyond these data, and if we were to manipulate them to bring about any given results we should be guilty of grave dishonesty. Hence when Mr. James points out that the resulting rates in one village differ unaccountably from another, and asks the reason, I can only refer him to the classification books and the proposed maxima rates on which the estimates are worked out. I can engage to give him chapter and verse for any discrepancy which way strike him in our estimates. But to show how simple is the solution of a discrepancy which may appear at frst sight serious, I would refer to a remark in Mr. James' paragraph 9, in which he asks why the village of Wasai should have an average rice rate of Rs. 7-5-0 and Jagatpur one of only Rs. 4. There is no secret of valuation involved in this difference, as supposed by Mr. James : it is simply because the maximum water-rate for rice land in the former village is Rs. 6 , while in the latter it is Rs. $3-8-0$. Further explanation would be superfluous. The minutim, of the absence of which in Mr. Fernandez's report Mr. James laments, are really available at the shortest notice and can be supplied $\alpha d$ libitum from our carefully prepared registers.


27. I beg to append an amended form of Appendix L, which includes the financial results of the alterations in groups I and III which I have recommended for adoption. The general result will be to increase the enhancement from Rs. 62.842 to Rs. 66,836, or by $23 \frac{1}{2}$ per cent. instead of 22 . I do not recommend that Government should further increase the revenue demand on this taluka at this period of its revenue history. Cousidering the enhancement
of assessment obtained in the revision settlement of the taluka of Dholka, which was notoriously much lower assessed at the old settlement, an enhancement of $23 \frac{1}{3}$ per cent. in the by no means leniently treated tuluka of Daskroi is what we might reasonably expect to obtain. The following is a synopsis of the financial results of the scheme as now amended considered group by group :-

28. If the sanction of Government be kindly accorded to these proposals with as little delay as possible I shall be able to arrange for the introduction of the rates before the break of the monsoon. This is a somewhat later date than is desirable; but as the period for the Collector to receive petitions against the rates from the villages will not expire till about the 18th instant, no greater expedition was possible. It would be a pity if by any further delay Government should lose the opportunity of collecting such a substantial anncunt of enhanced revenue as Rs. 66,836 in the ensuing revenue year. To enable the cultivators to make up their minds on the subject of resignations, I propose that the period for receiving such resignations should be extended to the 30th June for this year as a special case under Section 74 of the Land Revenue Code.
29. On the question of the treatment of fruit-trees standing in Government occupied lands which have not been conceded or sold to occupants, there is a wide difference of opinion between Messrs. James and Fernandez. i'he former sees unnecessary loss to Government and danger to the existence of the trees in making them over to the occupants, as was done in Dholka (paragraph 20 of Government Resolution No. 796, dated 3rd February 1888), while the latter sees justice in the concession and has no fear that it will be abused. Since 1867, the date of the Borsad settlement in Kaira, the plan of unreservedly conceding to the occupants the right to the Government trees in the lands they occupy bas been consistently followed by this Department and the concession has been found to be generally appreciated. In reviewing the proposals for Dholka, Mr. Sheppard, the Commissioner, N. D., gives us the result of rare experience on this point: "The people of Gujarat," he says, "value trees very highly and spend much labour and capital in planting and preserving them. There is probably no part of India more finely wooded than the two tálukás above named (Nadiád and Borsad), in which no trees were reserved. Under the spirit of Section 40, Land Revenue Code, I would propose that all trees on occupied lands should be considered the property of the occupants." The park-like beauty of the Gujarát country is due to the love of the people, especially Patidars, for trees, the pride they take in rearing them, and their taste for the fruit they bear. But in giving up part of their lands for trees the cultivators make an undoubted sacrifice, as not only is the shade prejudicial to their crops, but they harbour birds which do much damage. If in these days of revised settlements, when the land is strictly assessed acre by acre and guntha by guntha, we expect the cultivators to retain their love of trees, neither compensating them for the damage done to their crops, nor granting them the enjoyment of the fruit, we shall be grievously disappointed. If Government decides to reserve these fruit-trees altogether and sell the fruit they will be taking perhaps the surest step to cause their extinction, as under those circumstances the cultivators will not be induced to plant fresh trees as the old ones disappear. It might suggest itself, as an alternative, that the right to the fruit should be conceded to the cultivators, rules being made to restrict the cutting down of the trees; but the trees will never be so well cared for and repeated if they are not wholly the property of the cultivators.

Mr. Fernandez assures me that the number of villages in Daskroi in which fruittrees are conceded to the cultivators is larger than that in which the trees are reserved, and in denying that the former villages have undergone denudation he says: "On the contrary their appearance is far more picturesque than that of the others, for in the former one sees trees in all stages of growth and vigour, whereas in the latter they are all becoming aged, and at the end of the proposed lease they (the mangoes certainly) will most of them have died and been cut down for their deadwood."
30. If it is considered that in the villages of Rakhial and Bágfardos, which are close to Ahmedabad, the great demand for wood is likely to change the disposition of the cultivators towards the trees and to menace their existence in the event of full concession being made, it will of course be wise for Government to reserve either the trees themselves or the disposal of the fruit as a special case. But in either case Government must be prepared to find the groves disappear. The Collector may see that the trees are cared for until they die, but when that event occurs he can scarcely dare to plant fresh trees and rear them on land given out for cultivation, and the rayat will take no steps to replace them unless they are unreservedly at his disposal and removed from possible interference. I have no hesitation in supporting the proposals made by Mr. Fernandez in his paragraph 67.

I have the honour to be,<br>Sir,<br>Your most obedient Servant,<br>T. H. STEWART, Survey and Settlement Commissioner.

## APPENDIX A.

Dholka Sub-soil Water Classification Scale.

| Order I. |  |  | Order II. |  |  | Oxiar III. |  |  | Order IV. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class A. | Mass B. | Clase C . | Class A. | Clasat ${ }^{\text {B }}$ | Clans 0. | Clasa 4. | Class B. | Class C | Clagat | Clasa B. | $\text { Class } \mathrm{O} \text {. }$ |
| As, | As, | As. | As. | As. | A8. | As. | As. | As. . | As. | As. | As. |
| 2 | $1 \frac{1}{8}$ | 1 | 11 | - 1 | $\underline{8}$ | 1 | $\frac{1}{4}$ |  | $\frac{1}{2}$ | "*** | ...... |

APPENDIX B.
Daskroi Sub-soil ウater Classification Scale.
Orier I.
T. H. STEWART,

Survey and Settlement Commissioner.

APPENDIX C.
Accompaniment to the Survey and Settlement Commistioner's No. 755 dated 16th April 1889.

APPENDIX C-continued.




APPENDIX C-continued.



APPENDIX C-contivued.


APPENDIX C-concluded.


# Revenus Departurnt. <br> Bombay, 27th April 1889. 

## Forwarded to Government.

2. These proposals are rendered somewhat complicated by the corrections in the original classification, and by the addition of the sab-soil water rate in lieu of well taxation. The Surrey Commissioner has been at much pains to explain these disturbing elements, and I quite agree with him in most of his remarks.
3. Many villages in this taluke have the great advantage of being near the city of Ahmedabad; but independently of this advantage the taluka, as a whole, cannot bear comparison with some of those in Kaira. The villages immediately to the south of Ahmedabad and those beyond them, knowa as the Jetalpur group, are, however, exceptionally rich, and their rice lands among the most productive in Gujarat. But I think that Mr. Fernandez gives too much credit to the improvements in road communications. The Dholka road is still unmetalled; that to Parántij has many miles of the deepest sand in the provinces and that to Kapadranj is one of the worst roads in the Collectarate. The Jetalpur villages are more faroured, as they benefit to some extent by the made road to Barejri, and will shortly be connected by another similar road with Alumedabad. The southern portion of the táluka will also benefit largely by the proposed Khari cut extension which will irrigate as far as Piplod, and also allow more water for the Narol Branch.
4. The amount added for sub-soil water is probably no more than would have resulted from a revision. of the old rates, and this is a permanent settlenent of the water assessment?
5. The treatment of new rice appears to me to be just, and in accordance with the principles elsewhere adopted. The dhekudi rate is low.
6. It is in my opinion to be greatly regretted that the result of these carefully thought-out proposals should be to throw the burden of increase on the inferior villages. While the enhancement in the rich Jetalpur group, which I have mentioned as being specially favoured by soil, position and cultivation, is 10-8 per cent., that on the two lowest groups is $30-2$ and $50-2$ respectively. I can find no fault with the explanation submitted. The result is the consequence of existing rules but this will afford scanty consolation to the villages affected. General principles rust sometimes give way to considerations of utility, and I think that some modifications will be found necessary in revisions in the neighbouring tálukás of Kaira, where the complaint has always been that the assessment on the poorer soils is proportionately much higher than that on the richer land, and where this complaint is intensified by the fact that while the latter are cultivated by agriculturists of capital, and of great intelligence, the inferior lands are held by poor Kolis and Maiomedans.
7. This latter remark shows that $I$ am unable to concur in the Survey Commissioner's arguments in paragraphs 24-25 of his letter. The impossibility of applying inelastic rules to Gajarat has been recognized since the commencement of the survey, and I do not think that the most elaborate system of classification can supply sufficient guide for assessment, without consideration of the circumstances of the population, and of the standard of cultivation. In the year 1865 Mr . Ellis wrote:-
[^14]Add Colonel Prescott said :-
" If we go blindly according to a plan which we are pleased to call principle, and in Bring the maximum rates of villages make no allowance whatever for the condition of the inhabitants, we do harm instead of good."

- 302-43

8. I do not think that these remarks are less true now than when they were written. In some parts of Kaira, notably in the south-west of the Mátar Taluka, the Kolis have advanced, and their standard of agriculture will be found to be almost equal to that of the Pátidárs, but it will be many years before such advancement is general, or before we can altogther ignore "class rates".
9. Late experience must render the Revenue Department cautious in proposing changes of rates which when worked out by the survey may prove to be misleading, and I would therefore suggest that the Survey Commissioner may be asked whether some measure of relief cannot be devised for the last 40 villages in which, as no material improvement or progress therein has been shown, the enhancement appears to me to be too heavy. If no departure can be permitted from the principle under which a substantial increase is distributed almost entirely over the inferior groups, of a táluka, there is at least occasion for leniency as an act of grace. The deficit might be made up, in whole or in part, by an addition to the dhekudi rate; but for my own part I should not regret a slight reduction in the amount of general increase, for the reason that the difference between the $23 \frac{1}{3}$ per cent. thereof and the maximum limit ( 33 per cent.) does not, in my opinion, leave sufficient margin for dealing with the richer tálukás of Nadiad, Borsad and Anand.
10. Should the above suggestion not meet with the approval of Government, I would beg that the enhancement in the last two groups may be imposed gradually.
11. I entirely approve of the proposals regarding trees. No ill-effects have attended the grant of these with the occupancies, in Kaira. There is plenty of cutting, but still more planting, and the district is at least as well wooded as when I first knew it. But the case of Rakhial is clearly an exceptioial one, and the fine groves in this village should be reserved.

G. F. SHEPPARD,

Commissioner, N. D.

Revenue Survey and Assessment: Revision Settlement of 123 villages of the Daskroi Taluka of the Ahmedabad District.

No. 4475.
Rgyente Dbparthent.
Bombay Castle, 22nd June 1889.
Memorandum from the Commissioner, N. D., No. 1254, dated 27th April 1889—Submitting

Letter from the Deputy Superintendent, Gujarat Revenue Survey, No. 180, dated 20th Febraary 1889.
Letter from the Collector of Ahmedabad, No. 708, dated 6th March 1889.

Ietter from the Survey and Settiement Commissioner, No. 755, dated 16th April 1889.
the papers noted in the margin containing proposals for the revision settlement of 123 villages of the Daskroi Taluka of the Ahmedabad District.

Telegram from the Survey and Settlement Commissioner, dated 7th May 1889.
Memorandum from the Commissioner, N. D., No. 1367, dated 7th May 1889-Forwarding in continuation of his memorandum No. 1254, dated 27th April 1889, one from the Survey and Settlement Commissioner, No. 899, dated 3rd May 1889, together with a letter No. 1232, dated 29th April 1889, from the Collector of A.hmedabad, who submits petitions from the inhabitants of certain villages against the revised rates proposed to be introduced into 123 villages of the Daskroi Táluka of the Ahmedabad District; and makes remarks.
Memorandum from the Survey and Settlement Commissioner, No. 931, dated 7th May 1889. Memorandum from the Survey and Settlement Commissioner, No. 1110, dated 3rd June 1889-Forwarding one from the Collector of Ahmedabad, No. 1056 dated lst idem.

Memorandum from the Survey and Settlement Commissioner, No. 1221, dated 19th June 1889-Forwarding copy of his memorandum No. 1220 of the sande date to the address of the Deputy Superintendent, Gujarát Revenue Survey, in which he directs that every endeavour should be made for the introduction of the revised rates into the Daskroi Táluka before the close of the current year if possible; and makes remarks: the Survey and Settlement Commissioner recommending that the period of receiving notices of relinquishment may be extended to 31st July 1889 as a special case.

Resolutron.-These proposals for the revision survey settlement of Daskroi Táluka relate to 123 villages, of which 29 belonged, at the time of the original settlement, to the old Jetalpur Táluka. The term of the original settlement has expired in all cases.
2. The Honourable Mr. Stewart has concisely described the results of measurement and classification in paragraph 4 of his letter. In connexion with the latter it is observed that-
(a.) The existence of wells is quite disregarded in all cases.
(b.) All lands with available subsoil water advantages have had their soil classification raised a little in consequence.
(c.) Garden lands are no longer treated as gardens but as either dry crop or rice, allowance being in either case made for subsoil water.
(d.) Soil classification (with the exception of that of land with subsoil water) of both dry crop and rice land, and water classification of the latter have called for no material amendment.
(e.) New rice land has been treated not as rice but as dry crop.

It would appear that in the last clause of paragraph 9 of Mr. Fernandez's report, to the words "excepting those under (a)" should be added "and (b)".
3. The Honourable Mr. Stewart has stated the arguments for an increase of assessment so clearly and fully in paragraphs $5-9$ of his report that it is unnecessary for Government to recapitulate them, more especially as the Revenue officers are completely in accord with the Survey officers in considering that an increase is justified, and the Collector, Mr. James, gives reasons for thinking that the increase now proposed is less than. the circumstances of the case demand.
4. This is the first taluka the revision settlement of which brings into prominence the effects of the policy of Government in respect of assessment of irrigational facilities. The principle of that policy is that the inherent natural facility for irrigation should be taxed and not the artificial application and development of that facility. The reasons for the policy have been most fully elucidated and it is not necessary to explain them further. Such being the principle upon which Government for good reasons have decided to act in revision settlements, the results must be accepted. The features in the present case which appear to the Collector to be anomalous or paradoxical are all, or nearly all, to be attributed to the operation of the rule now adopted.
5. Mr. James has with much patience and acumen analysed so far as the data before him permitted, the incidence of the proposed settlement. In some minor particulars his criticism is directed to the operations of appraisement by the survey, but to make such criticism valuable a far more searching examination of the highly technical and detailed results of these operations than was within the Collector's reach would be necessary. It would be simply impossible for a Settlement officer to include in his report or even to show in appendices the processes by which appraisement results are in every group of cases arrived at, or the causes of differentiation. His Excellency the Governor in Council must rely, and feels that he can confidently rely, upon the experience and industry of the Survey and Settlement Commissioner, that the minute care essential to accuracy of method has been bestowed upon the preliminary pro* cesses in the survey and settlement of this as of other districts. The criticism of the Collector has this value that it supplies a motive for the most rigid scrutiny and requires the departmental officers to be able to say as the Commissioner in his paragraph 26 states:-"I cau engage to give him chapter and verse for any discrepancy which may appear at first sight serious."
6. But in its general scope Mr. James' criticism is directed against the results of the rule exempting "improvements" from taxation and the method of

Its application. It is of course the case that under the proposed settlement the assessment on wells has been removed, but it is not correct to say that this taxation has been transferred to any other class for the benefit of the wellowners. Mr. James hardly appears to realize that under the present rules it is theoretically a matter of indifference to the assessing officer what use is made of the land. The facility for irrigation from wells given by subsoil water and the facility tor impounding rain water given by levels and other natural character. istics are matters to be taken into consideration on appraisement of soil. Iu the Konkan it has been found possible to bring this latter feature into account as affording prospect of easy conversion of dry crop into rice land. In Gujarát this would probably be far less easý but the assessment of rice water in the old settlements and the classitication of new rice land as first class jirait in the new settlement are based upon the rental value of such natural facilities. This is indeed clearly recognized by Mr. James in his paragraph 6, but he has not given the value it deserves to the consideration of the public interest in encouraging the development of these natural advantages and the check which such development would undoubtedly receive were Government to demand from rayats who by their industry have created new production, the same assessment as from those who have succeeded to the fruits of the iadustry of remote generations.
7. That the assessment of some of the rice lands is lowered is due entirely and solely to the substitution of subsoil water advantages for the assessment on wells which has also led to the reduction of assessment in garden lands. If it is clearly remembered that practically all land has now to be treated as "dry crop" with varyiug advantages as regards subsoil or rainfall water, many of Mr. James' difficulties which at first sight appear to be well founded will dis.. appear.
8. It is quite possible that the results of the system as now applied to Daskroi will appear to the rayats unaccountable. If the $y$ conduce to stimulate industry and the investment of capital on improvements, Government can well afford to be misunderstood.
9. The assessment groups proposed by the Deputy Superiutendent are constituted as follows:-

| Gronp. |  |  | No. of villagea. | Dry crop maximum rates. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Rs. a. |
| $1 .$. | ... | - | 20 | 440 |
| $2 .$. | -.** | -.. | 10 | 400 |
| $3 .$. | ... | - | 11 | 3120 |
| $4 \ldots$ | ... | ... | 42 | 380 |
| $5 \ldots$ | -. | ... | 37 | 340 |
| $6 \ldots$ | ... | .0. | 3 | 300 |

Considerable modifications of this grouping are proposed by the Collector. The Survey and Settlement Commissioner only accepts them to a limited extent and recommends the transfer of the village of Ghodásar trom the second to the first group, and of 20 villages, specified in paragraph 20 of his report, which belonged to the old Jetalpur Táluka, from the fourth to the third group. His Excellency the Governor in Council, after very careful consideration of the circumstances, is pleased to sanction the first of these proposals, but as regards the second he is of opinion that the Jetalpur villages specified should be placed in the second group, with the proyiso, however, that the Collector should watch the operation of the rates in these villages and report, after the expiration of two years, whether or not hardship has resulted therefrom. Government are further of opinion that there should be no sixth group, and that the villages proposed for inclusion therein should be transferred to the fiftls. The groups in accordance with these orders will be constituted as follows:-

| Group. |  |  |  |  | No. of <br> villages. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 21 |
| 2 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 29 |
| 3 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 11 |
| 4 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 22 |
| 5 | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ | 40 |
|  |  |  |  |  |  |
|  |  |  |  |  | 123 |

10. The water-rates for rice land given in paragraph 50 of the Deputy Superintendent's report, and the rates for bhatha and dhekudiat land described in paragraphs 55-60 thereof are sanctioned.
11. The effect of the modifications of the Survey and Settlement Commissioner's proposals ordered in paragraph 10 above will be to raise the percentage of enhancenent above that given in the table appended to paragraph $2{ }^{\circ}$ of the Honourable Mr. Stewart's report. The Acting Survey and Settlement Commissioner should be requested to inform Government with the least possible delay what the percentage enhancement will be, and to submit a table similar to that given in the paragraph referred to together with any explanations that may be necessary as regards excessive enhancements in particular groups or in individual villages. The rates should be introduced before the expiration of the current year, and guaranteed for thirty years. The periud for receiving resignations under Section 74 of the Land Revenue Code may as a special case be extended for the current year up to 31st July.
12. The petitions of objection to the rates forwarded with the Cominissioner's memorandum No. 1367 of 7th May 1889 disclose no reasons for withholding sanction to the settlement.
13. The Survey and Settlement Commissioner's proposals for the disposal of fruit trees are sanctioned.

## J. Dr C. ATEINS, Acting Under Secretary to Government.

To
The Commissioner, N. D., *
The Collector of Ahnedabad (with the petitions),
The Gurvey and Settlement Commissioner,
With an intimation that

The Director of Land Records and Agriculture,
The Public Works Department of the Secretariat, The Accountant General. the papers are being printed in the form of a Selection from -the Records of Govermment, copies of it will be forwarded to them.

The Government of India,
The Secretary of State for India, $\}$ By letter:

NOTR.-Copies of the Selection will be forwarded direct to the Depinty Superintendent, Gujarat Fevenue Survey.
" The Deputy Superintendont, Gujarat Revenue Survey, has been informed by telegram.

- $302-44$


[^0]:    2nd.-To the State, as a capitalist, owning existing means of irrigation.

[^1]:    Note-A copy of Captain Francis' letter, 'referred to in paragraph 15, not eppended, because not necessary to be printed.

[^2]:    Hills, rivers, roade, village sites, \&c., not included in survey numbers ... ... ... ... ... 8,169

    Total *... Acres 155,761
    5. The population of the Government villages has been found by the survey Population. $\quad$ to amount to 78,392 , giving an average of $363 \cdot 20$ per 362-21 square mile. The condition of the people, especially of

[^3]:    10. Nearly the whole of the pargana is composed of the goridu, or sandy

    General disisions of aoil.
    light-coloured alluvial soil, common in Northern Gujarat. This varies extremely in fertility (principally

[^4]:    *The assessment on Government waste arable lands at the proposed rates is Re. 63,674 and the surrey kamál Rs. 2,40,260.

[^5]:    Whether the practice, now followed in the Gujarat Survey, of allowing a certain time to elapse before permanently gaaranteeing revised rates of assessment might not be discontinued.

[^6]:    - Vote.-In 2 Daskroi villagos alienated lands only are affected by the repision,

[^7]:    

[^8]:    * "Kuvetar", the area which, at the building of the well, was assigned to it for irrigation.

[^9]:    - 362-0

[^10]:    - I append a atatement, marked A, showing the division of 3 villages close to my present camp (Pirana). Taken at random, they afford an illustration of the variety of classes into which rice land was divided at the former survey. These figares are accurate, but the statistics of areas under the more or less valuable kinds of rice are not. The crop returns give only the general entry "rice:" so the people, from whom the details of the "rice" were obtained, knowing that revision is imminent, have, I am quite certain, underestimated the area under Kamod. It will be noted that the occupied rice area in these 3 villages is divided as follows :-

    |  |  |  |  | Per cent. , |
    | :--- | :--- | :--- | :--- | :---: | :---: |
    | Irrigated from wells | $\ldots$ | $\ldots$ | $\ldots$ | 32.2 |
    | Irrigated from tanks | $\ldots$ | $\ldots$ | $\ldots$ | 37.6 |
    | "Akasia" or rainfall only | $\ldots$ | $\ldots$ | $\ldots$ | 30.0 |

    The commonest sort of Sutarsal is said to be grown in no less than $83 \cdot 7$ per cent, of the whole area.

[^11]:    * Note also the following difference :- 27 acres are new kyari, which bring Rs. 132 . The 27 acres of old are to pas Ks. 164:80 much for being pradent a generation too soon, the ownert of the old will say.

[^12]:    * Fide the following extract :-
    "The proprietors of villages * * possess the right to all trees which may fall down, although the produce may belong to the tenant who caltivates the land." (Colonel Walker quoted in Forbes' Rás Mála, Vol. II,. p. 250.)
    + Since writing the above I find that of a revenue of Rs. 2,120 received last year, the trees of Rakhiál produced Rs. 637 and Bágfardos Rs. 328. The remaining revenue came from 53 villages, yielding on an average Rs. 22 a village. I would, therefore, keep the trees of Rakhial and Bagfardos, which are close to Ahmedabad, just as they are, and offer 'the remainder to the owners of the fields at ten years' purchase.

[^13]:    B 368-39

[^14]:    "Vilkges inhabited by Kunbi and Koli cultivators cannot be put on a par with respect to assessment, without either sacrificing the Government revenue, or disconraging the less civilized and improvident tribe of Kolis from the pursuit of agriculture."

