

GOVERNMENT OF INDIA  
MINISTRY OF AGRICULTURE AND FARMERS WELFARE  
DEPARTMENT OF AGRICULTURAL RESEARCH & EDUCATION

**LOK SABHA**  
**STARRED QUESTION NO. 22**  
TO BE ANSWERED ON 01/12/2015

**IMPACT OF CLIMATE CHANGE ON AGRICULTURE**

**\*22. SHRI ASHOK SHANKARRAO CHAVAN:  
SHRI NARANBHAI KACHHADIYA:**

Will the Minister of AGRICULTURE & FARMERS WELFARE  
कृषि और कृषक कल्याण मंत्री be pleased to state:

- (a) whether sudden change in weather pattern has resulted in crop damage, poor yield and loss of income to the farmers;
- (b) if so, the total loss incurred by farmers during each of the last three years and the current year in each State/UT on this account;
- (c) whether the sudden change of climate has also resulted in heavy rains, hailstorms, cyclones, deficient rains, drought etc., if so, the regions prone to this abnormal weather pattern; and
- (d) the contingency plan drawn by the Government to overcome climate change and the action initiated by Agricultural Universities/Institutions to produce seeds which can withstand the severe weather pattern?

**ANSWER**

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE  
कृषि और कृषक कल्याण मंत्री (SHRI RADHA MOHAN SINGH)

**(a) to (d):** A Statement is laid on the Table of the House.

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**STATEMENT IN RESPECT OF PARTS (a) to (d) OF LOK SABHA STARRED  
QUESTION NO. 22 TO BE ANSWERED ON 01/12/2015 REGARDING  
“IMPACT OF CLIMATE CHANGE ON AGRICULTURE”**

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(a) Yes, Madam.

(b) Sudden change in weather pattern has resulted in crop damage, poor yield and loss of income to farmers. The losses to crops in the affected states are assessed by the Inter-Ministerial Central Teams (IMCTs). On the recommendation of IMCTs Government of India approved central assistance to states under National Disaster Response Fund (NDRF). In total, assistance of Rs.4464.64 crore during 2012-13, Rs.2854.19 crore during 2013-14 and Rs.9017.99 crore during 2014-15 has been approved to affected states. During Kharif 2015, in view of the deficit rainfall states like Karnataka, Chhattisgarh, Madhya Pradesh and Maharashtra, Uttar Pradesh and Odisha have submitted Memoranda seeking total financial assistance of Rs.23739.79 crore. Telangana has declared drought in 231 mandals of 7 districts and submitted an interim Memorandum for Rs. 1846.60 crores for financial assistance under NDRF. Final financial memorandum for the state is awaited. The state-wise details are in **Annexure-I**.

(c) Anomalous weather and climate events in various regions could have been influenced due to global warming and long-term climate change besides natural variability of climate system. However, from the available meteorological data in the country, it is difficult to draw a definite relationship between climate change and extreme weather events experienced in the recent past. State-wise details of districts declared drought affected during 2015-16 is in **Annexure (IIa)**. ICAR-CRIDA mapped 572 districts of the country for their vulnerability to extreme events due to climate change. The vulnerability was assessed high to very high in 230 districts, medium in 114 districts and low to very low in 228 districts. Details are annexed (**Annexure-IIb**).

(d) The Indian Council of Agricultural Research (ICAR) in collaboration with State Agricultural Universities and concerned state departments has developed district contingency plans including crops advisories to tackle any eventuality due to change in weather pattern affecting the agriculture sector across the country. So far, contingency plans for 600 districts covering 25 states have been prepared and uploaded at [www.farmer.gov.in](http://www.farmer.gov.in), [www.crida.in](http://www.crida.in) and [www.agricoop.nic.in](http://www.agricoop.nic.in). The contingency plans are also being constantly updated to meet the emerging situations.

To operationalize the contingency plan a National Consultation Meeting besides interface meetings with 11 states (Maharashtra, Jharkhand, Chhattisgarh, Gujarat, Telangana, Madhya Pradesh, Rajasthan, Andhra Pradesh, Karnataka, Uttar Pradesh and Haryana) were conducted during May-June, 2015.

The National Agricultural Research System comprising ICAR, Central Agricultural Universities and SAUs are taking adequate steps in development of suitable varieties, which can withstand the severe weather aberrations including deficient rainfall/drought. Short duration varieties have also been released to escape or overcome the vagaries of weather. The details are presented in **Annexure-III**.

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**Information on assistance from National Disaster Response Fund (NDRF) for Natural Calamities in the States**

(₹ in crores)

| Year             | State          | Calamity    | Total expenditure projected by State in Memorandum submitted to GOI | Total requirement of Expenditure assessed by GOI | Central assistance approved by GOI (under N.D.R.F.) |
|------------------|----------------|-------------|---|--|---|
| 2012-13          | Karnataka      | Drought     | 7672.40   | 718.93   | 526.06  |
|                  | Maharashtra    | Drought     | 3232.15   | 807.73   | 778.09  |
|                  |                | Drought     | 1801.32   | 872.06   | 1036.98   |
|                  | Kerala         | Drought     | 1996.07   | 69.10  | 62.61   |
|                  |                | Drought     | 532.78  | 77.61  | 107.89  |
|                  | Gujarat        | Drought     | 7357.54   | 864.71   | 864.71  |
|                  | Rajasthan      | Drought     | 1107.99   | 634.93   | 320.64  |
|                  | Andhra Pradesh | Drought     | 1090.78   | 167.04   | 142.97  |
| Tamil Nadu       | Drought        | 19665.13    | 742.07  | 624.69   |   |
|                  | <b>Total</b>   |             | <b>44456.16</b>   | <b>4954.18</b>                                   | <b>4464.64</b>                                      |
| 2013-14          | Bihar          | Drought     | 12564.04  | 1226.78  | 931.87  |
|                  | Karnataka      | Drought     | 778.06  | 319.52   | 226.57  |
|                  |                | Hailstorm   | 99.12   | 99.11  | 82.77   |
|                  | Andhra Pradesh | Drought     | 638.09  | 266.61   | 254.54  |
|                  |                | Hailstorm   | 59.71   | 33.40  | 40.06   |
|                  | Maharashtra    | Hailstorm   | 4475.76   | 1438.74  | 552.88  |
|                  | Madhya Pradesh | Hailstorm   | 5723.65   | 471.12   | 494.95  |
|                  | Uttar Pradesh  | Hailstorm   | 500.53  | 365.15   | 270.55  |
|                  | <b>Total</b>   |             | <b>24838.96</b>   | <b>4220.43</b>                                   | <b>2854.19</b>                                      |
| 2014-15          | Haryana        | Drought     | 4829.25   | 332.10   | 168.87  |
|                  |                | Hailstorm   | 1925.97   | 718.68   | 369.09  |
|                  | Maharashtra    | Drought     | 6013.28   | 3508.47  | 1962.99   |
|                  |                | Drought     | 779.20  | 319.47   | 200.85  |
|                  | Karnataka      | Hailstorm   | 151.28  | 149.32   | 105.33  |
|                  |                | Drought     | 4819.49   | 991.35   | 777.34  |
|                  | Uttar Pradesh  | Hailstorm   | 7573.70   | 6298.89  | 2801.59   |
|                  |                | Drought     | 1532.00   | 237.86   | 237.51  |
|                  | Rajasthan      | Hailstorm   | 11885.45  | 2742.46  | 1447.73   |
|                  | Bihar          | Hailstorm   | 2041.10   | 863.11   | 791.42  |
| Himachal Pradesh | Hailstorm      | 353.595     | 114.00  | 71.53  |   |
| Telangana        | Hailstorm      | 117.59      | 103.23  | 83.744   |   |
|                  | <b>Total</b>   |             | <b>42021.90</b>   | <b>16378.94</b>                                  | <b>9017.99</b>                                      |
| 2015-16          | Karnataka      | Drought     | 3830.84   | 2176.22  | 1540.20   |
|                  | Chhattisgarh   | Drought     | 6093.79   |  |   |
|                  | Madhya Pradesh | Drought     | 4220.39   |  |   |
|                  | Maharashtra    | Drought/    | 4002.82   |  |   |
|                  |                | Pest Attack |   |  |   |
|                  | Odisha         | Drought     | 1687.56   |  |   |
|                  | Uttar Pradesh  | Drought     | 2057.79   |  |   |
|                  | Telangana      | Drought     | 1846.60   |  |   |
|                  | <b>Total</b>   |             | <b>23739.79</b>   |  |   |

**STATE-WISE DETAILS OF DISTRICTS DECLARED DROUGHT AFFECTED  
DURING – 2015-16**

| Sl. No. | Name of State/<br>total number of<br>districts | No. of districts/<br>talukas   | Name of districts   |
|---------|--|--------------------------------|---|
| 1.      | <b>Karnataka (30)</b>                          | <b>27<br/>(126 taluks)</b>     | Bangalore Rural, Ramanagara, Kolar, Chickballapur, Tumakuru, Chitradurga, Davanagere, Chamarajanagar, Mysuru, Mandya, Ballari, Koppal, Raichur, Kalaburgi, Yadgir, Bidar, Belagavi, Bagalkote, Vijapura, Gadag, Haveri, Dharwad, Shivamogga, Hassan, Kodagu, Uttara Kannada, Chikkamagaluru   |
| 2.      | <b>Chhattisgarh<br/>(27)</b>                   | <b>25<br/>(110 tehsils)</b>    | Raipur, Gariband, Mahasamund, Dhamtari, Durg, Balod, Bemetara, Rajnandgaon, Kabirdham, Baster, Kondagaon, Narayanpur, Kanker, Dantewara, Sukma, Bijapur, Bilaspur, Mungeli, Janjgir Chamap, Korba, Balrampur, Surajpur, Koriya, Raigarh, Jashpur  |
| 3.      | <b>Madhya Pradesh (51)</b>                     | <b>22<br/>(141 tehsils)</b>    | <b><u>Drought</u></b><br>Katni, Shahdol, Umaria, Anuppur, Tikamgarh, Rewa, Jabalpur, Sidhi, Sagar, Damoh, Seoni, Sigroli, Sheopur, Chhatarpur, Bhind, Panna, Satna, Dindori, Shivpuri, Mandsaur, Morena, Jhabua<br><b><u>Pest Attack</u></b><br>Guna, Ratlam, Dewas, Shahjapur, Khandwa, Burhanpur, Badwani, Sehore, Raisen, Rajgarh, Vidisha, Betul, Hoshangabad, Harda, Balaghat, Narsinghpur, Agar Malwa, Chhindwara   |
| 4.      | <b>Maharashtra</b>                             | <b>21<br/>(15747 villages)</b> | Nashik, Dhule, Nadurbar, Jalgaon, Ahmednagar, Pune, Satara, Sangli, Aurangabad, Jalna, Beed, Latur, Osmanabad, Nanded, Parbhani, Hingoli, Buldhana, Akola, Yeotmal, Nagpur, Gadchiroli  |
| 5.      | <b>Odisha</b>                                  | <b>21<br/>(139 Blocks)</b>     | Angul, Bargarh, Balangir, Boudh, Cuttack, Jajpur, Kalahandi, Kandhamal, Keonjhar, Khordha, Koraput, Mayurbhanj, Nabarangpur, Nayagarh, Nuapada, Puri, Rayagada, Sambalpur, Subarnapur, Sundergarh   |
| 6.      | <b>Andhra Pradesh</b>                          | <b>7<br/>(196 Mandals)</b>     | Srikakulam, Prakasam, SPS Nellore, Chittoor, Kadapa, Ananthapuram, Kurnool<br><b>(Memorandum seeking financial Assistance is yet to be received)</b>  |
| 7.      | <b>Uttar Pradesh</b>                           | <b>50</b>                      | Sant Ravidas Nagar, Sonbhadra, Sultanpur, Mirzapur, Ballia, Sidhartha Nagar, Shajahanpur, Banda, Pratapgarh, Chandauli, Etawah, Basti, Baghpat, Jaunpur, Faizabad, Gonda, Kannauj, Barabanki, Sant Kabir Nagar, Jhansi, Jalaun, Gorakhpur, Hathras, Etah, Allahabad, Ghaziabad, Farukhabad, Mau, Unnao, Rampur, Hamirpur, Lalitpur, Chitrakoot, Kanpur Nagar, Lucknow, Deoria, Mainpuri, Maharajganj, Agra, Auraiya, Pilibhit, Amethi, Mahoba, Rai Bareilly, Kushi Nagar, Kanpur Dehat, Kaushambi, Fatehpur, Ambedkar Nagar and Balrampur |
| 8.      | <b>Telangana</b>                               | <b>7<br/>( 231 mandals)</b>    | Mahabubnagar, Medak, Nizamabad, Ranga Reddy, Nalgonda, Karimnagar and Warangal  |

**Number of drought affected district – 180**

**Number of district affected by pest attack - 18**

**Relative rankings of districts based on exposure, sensitivity, adaptive capacity  
and vulnerability indices**

| State             | District        | Rank based on |             |                   |               |
|-------------------|-----------------|---------------|-------------|-------------------|---------------|
|                   |                 | Exposure      | Sensitivity | Adaptive Capacity | Vulnerability |
| A & N Islands     | A & N Islands   | 546           | 528         | 453               | 537           |
| Andhra Pradesh    | Chittoor        | 1             | 279         | 267               | 18            |
| Andhra Pradesh    | Anantapur       | 492           | 120         | 421               | 56            |
| Andhra Pradesh    | Mahabubnagar    | 108           | 275         | 347               | 116           |
| Andhra Pradesh    | Kurnool         | 507           | 243         | 370               | 187           |
| Andhra Pradesh    | Cuddapah        | 538           | 217         | 271               | 312           |
| Andhra Pradesh    | Medak           | 515           | 297         | 307               | 339           |
| Andhra Pradesh    | Adilabad        | 474           | 374         | 425               | 340           |
| Andhra Pradesh    | Prakasam        | 561           | 266         | 275               | 434           |
| Andhra Pradesh    | Rangareddy      | 520           | 294         | 160               | 467           |
| Andhra Pradesh    | Guntur          | 536           | 208         | 94                | 477           |
| Andhra Pradesh    | Srikakulam      | 547           | 305         | 185               | 482           |
| Andhra Pradesh    | Visakhapatnam   | 567           | 351         | 362               | 503           |
| Andhra Pradesh    | Warangal        | 500           | 339         | 157               | 512           |
| Andhra Pradesh    | Nellore         | 541           | 284         | 76                | 541           |
| Andhra Pradesh    | East Godavari   | 564           | 283         | 124               | 547           |
| Andhra Pradesh    | Nizamabad       | 560           | 329         | 134               | 549           |
| Andhra Pradesh    | Karimnagar      | 553           | 343         | 119               | 557           |
| Andhra Pradesh    | Vizianagaram    | 569           | 342         | 276               | 558           |
| Andhra Pradesh    | Khammam         | 562           | 409         | 269               | 559           |
| Andhra Pradesh    | Nalgonda        | 568           | 296         | 166               | 560           |
| Andhra Pradesh    | West Godavari   | 565           | 237         | 44                | 564           |
| Andhra Pradesh    | Krishna         | 570           | 209         | 74                | 565           |
| Arunachal Pradesh | Tawang          | 43            | 557         | 506               | 384           |
| Arunachal Pradesh | East Kameng     | 92            | 564         | 551               | 388           |
| Arunachal Pradesh | Upper Subansiri | 97            | 572         | 555               | 406           |
| Arunachal Pradesh | West Siang      | 147           | 570         | 540               | 446           |
| Arunachal Pradesh | Upper Siang     | 150           | 566         | 531               | 451           |
| Arunachal Pradesh | West Kameng     | 84            | 568         | 505               | 466           |
| Arunachal Pradesh | Dibang valley   | 53            | 571         | 476               | 496           |
| Arunachal Pradesh | Tirap           | 460           | 569         | 549               | 502           |
| Arunachal Pradesh | Lower Subansiri | 174           | 560         | 487               | 504           |
| Arunachal Pradesh | Lohit           | 122           | 561         | 465               | 510           |
| Arunachal Pradesh | Changlang       | 61            | 567         | 391               | 538           |
| Arunachal Pradesh | Kurung Kumey    | 175           | 565         | 401               | 551           |
| Arunachal Pradesh | Papum Pare      | 148           | 562         | 343               | 562           |
| Arunachal Pradesh | East Siang      | 312           | 559         | 238               | 569           |
| Assam             | Karbi-Anglong   | 77            | 451         | 552               | 109           |

|       |                 |     |     |     |     |
|-------|-----------------|-----|-----|-----|-----|
| Assam | Barpeta         | 364 | 330 | 410 | 216 |
| Assam | N C Hills       | 71  | 538 | 529 | 288 |
| Assam | Hailakandi      | 239 | 397 | 363 | 365 |
| Assam | Dhemaji         | 333 | 420 | 376 | 399 |
| Assam | Nalbari         | 393 | 365 | 303 | 416 |
| Assam | Kamrup          | 291 | 362 | 258 | 419 |
| Assam | Dhubri          | 442 | 358 | 301 | 423 |
| Assam | Morigaon        | 51  | 404 | 205 | 432 |
| Assam | Golaghat        | 293 | 432 | 326 | 448 |
| Assam | Karimganj       | 431 | 456 | 355 | 483 |
| Assam | Nagaon          | 180 | 408 | 203 | 487 |
| Assam | Kokrajhar       | 385 | 477 | 353 | 490 |
| Assam | Goalpara        | 456 | 402 | 255 | 501 |
| Assam | Bongaigaon      | 451 | 423 | 292 | 505 |
| Assam | Lakhimpur       | 328 | 436 | 237 | 515 |
| Assam | Sonitpur        | 331 | 455 | 273 | 516 |
| Assam | Dibrugarh       | 357 | 443 | 248 | 520 |
| Assam | Tinsukia        | 436 | 493 | 325 | 527 |
| Assam | Jorhat          | 448 | 463 | 281 | 532 |
| Assam | Sibsagar        | 444 | 471 | 227 | 546 |
| Assam | Cachar          | 571 | 498 | 385 | 571 |
| Assam | Darrang         | 572 | 405 | 212 | 572 |
| Bihar | Kishanganj      | 47  | 194 | 427 | 27  |
| Bihar | Madhubani       | 63  | 169 | 414 | 29  |
| Bihar | Araria          | 5   | 314 | 399 | 43  |
| Bihar | Darbhanga       | 200 | 78  | 278 | 45  |
| Bihar | Supaul          | 13  | 233 | 260 | 61  |
| Bihar | Bhagalpur       | 38  | 218 | 282 | 77  |
| Bihar | Gopalganj       | 245 | 135 | 234 | 127 |
| Bihar | Saran           | 272 | 175 | 288 | 129 |
| Bihar | Purnea          | 24  | 316 | 310 | 132 |
| Bihar | Saharsa         | 115 | 228 | 274 | 134 |
| Bihar | Siwan           | 211 | 137 | 201 | 150 |
| Bihar | Katihar         | 21  | 319 | 286 | 153 |
| Bihar | Patna           | 227 | 125 | 175 | 164 |
| Bihar | Buxar           | 125 | 152 | 176 | 167 |
| Bihar | Sitamarhi       | 206 | 176 | 202 | 175 |
| Bihar | Nalanda         | 250 | 136 | 177 | 178 |
| Bihar | Champanan(East) | 309 | 230 | 266 | 186 |
| Bihar | Champanan(West) | 374 | 338 | 450 | 194 |
| Bihar | Samastipur      | 261 | 174 | 199 | 195 |
| Bihar | Muzafarpur      | 240 | 232 | 235 | 207 |
| Bihar | Vaishali        | 119 | 231 | 187 | 213 |
| Bihar | Begusarai       | 162 | 188 | 148 | 233 |
| Bihar | Lakhisarai      | 223 | 277 | 263 | 240 |
| Bihar | Jahanabad       | 396 | 249 | 247 | 255 |
| Bihar | Banka           | 204 | 350 | 372 | 260 |

|                      |                      |     |     |     |     |
|----------------------|----------------------|-----|-----|-----|-----|
| Bihar                | Bhojpur              | 237 | 200 | 118 | 323 |
| Bihar                | Jamui                | 380 | 410 | 457 | 330 |
| Bihar                | Madhepura            | 20  | 320 | 114 | 334 |
| Bihar                | Sheikhpura           | 220 | 278 | 159 | 351 |
| Bihar                | Aurangabad           | 308 | 333 | 220 | 385 |
| Bihar                | Khagaria             | 176 | 223 | 60  | 404 |
| Bihar                | Sivhar               | 273 | 257 | 100 | 411 |
| Bihar                | Rohtas               | 277 | 302 | 138 | 412 |
| Bihar                | Bhabhua(kaimur)      | 265 | 355 | 215 | 435 |
| Bihar                | Gaya                 | 340 | 372 | 206 | 479 |
| Bihar                | Nawadha              | 354 | 368 | 186 | 494 |
| Bihar                | Monghyr              | 257 | 364 | 112 | 528 |
| Chhattisgarh         | Kawardha             | 154 | 369 | 485 | 148 |
| Chhattisgarh         | Sarguja              | 130 | 442 | 532 | 151 |
| Chhattisgarh         | Rajnandgaon          | 177 | 378 | 491 | 160 |
| Chhattisgarh         | Koriya               | 83  | 496 | 545 | 174 |
| Chhattisgarh         | Dantewara            | 324 | 553 | 572 | 193 |
| Chhattisgarh         | Jashpur              | 207 | 480 | 544 | 204 |
| Chhattisgarh         | Durg                 | 75  | 331 | 321 | 221 |
| Chhattisgarh         | Mahasamund           | 137 | 379 | 398 | 264 |
| Chhattisgarh         | Bilaspur             | 99  | 412 | 395 | 302 |
| Chhattisgarh         | Bastar               | 383 | 542 | 567 | 305 |
| Chhattisgarh         | Kanker               | 373 | 501 | 524 | 331 |
| Chhattisgarh         | Korba                | 228 | 527 | 500 | 372 |
| Chhattisgarh         | Raigadh              | 231 | 479 | 449 | 376 |
| Chhattisgarh         | Janjgir              | 219 | 360 | 253 | 397 |
| Chhattisgarh         | Raipur               | 96  | 429 | 279 | 436 |
| Chhattisgarh         | Dhamtari             | 255 | 377 | 222 | 449 |
| Dadra & Nagar Haveli | Dadra & Nagar Haveli | 274 | 416 | 289 | 460 |
| Daman & Diu          | Daman & Diu          | 186 | 72  | 230 | 51  |
| Goa                  | Goa                  | 391 | 472 | 231 | 539 |
| Gujarat              | Patan                | 29  | 17  | 375 | 6   |
| Gujarat              | Amreli               | 109 | 12  | 254 | 8   |
| Gujarat              | Surendranagar        | 81  | 61  | 361 | 15  |
| Gujarat              | Kutch                | 321 | 65  | 386 | 21  |
| Gujarat              | Banaskantha          | 151 | 37  | 245 | 22  |
| Gujarat              | Mehsana              | 19  | 39  | 105 | 34  |
| Gujarat              | Ahmedabad            | 67  | 56  | 151 | 47  |
| Gujarat              | Bhavnagar            | 155 | 60  | 188 | 50  |
| Gujarat              | Rajkot               | 158 | 45  | 168 | 54  |
| Gujarat              | Jamnagar             | 544 | 35  | 298 | 55  |
| Gujarat              | Junagadh             | 376 | 43  | 153 | 81  |
| Gujarat              | Sabarkanta           | 70  | 123 | 181 | 102 |
| Gujarat              | Panchmahal           | 112 | 256 | 335 | 107 |
| Gujarat              | Porbandar            | 566 | 36  | 285 | 111 |
| Gujarat              | Gandhinagar          | 31  | 53  | 50  | 123 |
| Gujarat              | Dahod                | 195 | 271 | 369 | 131 |

|                  |                |     |     |     |     |
|------------------|----------------|-----|-----|-----|-----|
| Gujarat          | Dang           | 116 | 517 | 564 | 173 |
| Gujarat          | Bharuch        | 466 | 173 | 268 | 184 |
| Gujarat          | Vadodara       | 48  | 214 | 145 | 200 |
| Gujarat          | Narmada        | 36  | 390 | 379 | 230 |
| Gujarat          | Kheda          | 439 | 94  | 96  | 272 |
| Gujarat          | Anand          | 278 | 66  | 17  | 407 |
| Gujarat          | Surat          | 39  | 341 | 73  | 472 |
| Gujarat          | Valasad        | 145 | 396 | 193 | 476 |
| Gujarat          | Navsari        | 33  | 359 | 83  | 489 |
| Haryana          | Kaithal        | 315 | 13  | 34  | 124 |
| Haryana          | Fatehabad      | 518 | 7   | 46  | 142 |
| Haryana          | Jhajjar        | 484 | 28  | 79  | 143 |
| Haryana          | Sirsa          | 517 | 25  | 78  | 161 |
| Haryana          | Bhiwani        | 531 | 77  | 216 | 162 |
| Haryana          | Panipet        | 123 | 22  | 21  | 169 |
| Haryana          | Jind           | 427 | 21  | 36  | 183 |
| Haryana          | Hissar         | 512 | 48  | 95  | 215 |
| Haryana          | Mahendragarh   | 542 | 62  | 136 | 223 |
| Haryana          | Kurukshetra    | 313 | 15  | 8   | 262 |
| Haryana          | Faridabad      | 419 | 33  | 26  | 290 |
| Haryana          | Gurgaon        | 501 | 52  | 49  | 320 |
| Haryana          | Rewari         | 489 | 75  | 63  | 324 |
| Haryana          | Karnal         | 243 | 32  | 9   | 327 |
| Haryana          | Sonipet        | 341 | 34  | 20  | 329 |
| Haryana          | Rohtak         | 407 | 79  | 38  | 360 |
| Haryana          | Panchkula      | 390 | 269 | 123 | 427 |
| Haryana          | Ambala         | 478 | 69  | 18  | 462 |
| Haryana          | Yamunanagar    | 416 | 126 | 16  | 523 |
| Himachal Pradesh | Kullu          | 275 | 334 | 470 | 139 |
| Himachal Pradesh | Shimla         | 156 | 363 | 456 | 188 |
| Himachal Pradesh | Chamba         | 267 | 407 | 501 | 196 |
| Himachal Pradesh | Bilaspur       | 27  | 411 | 397 | 226 |
| Himachal Pradesh | Kinnaur        | 493 | 281 | 354 | 245 |
| Himachal Pradesh | Hamirpur       | 218 | 401 | 415 | 309 |
| Himachal Pradesh | Mandi          | 249 | 447 | 440 | 364 |
| Himachal Pradesh | Una            | 302 | 352 | 284 | 373 |
| Himachal Pradesh | Kangra         | 453 | 414 | 334 | 457 |
| Himachal Pradesh | Sirmaur        | 197 | 509 | 351 | 495 |
| Himachal Pradesh | Solan          | 352 | 494 | 314 | 522 |
| Himachal Pradesh | Lahaul & Spiti | 557 | 400 | 200 | 561 |
| Jammu & Kashmir  | Rajouri        | 69  | 417 | 459 | 211 |
| Jammu & Kashmir  | Doda           | 247 | 427 | 503 | 231 |
| Jammu & Kashmir  | Udhampur       | 85  | 461 | 490 | 246 |
| Jammu & Kashmir  | Pulwama        | 153 | 207 | 130 | 285 |
| Jammu & Kashmir  | Budgam         | 105 | 226 | 129 | 287 |
| Jammu & Kashmir  | Poonch         | 128 | 394 | 396 | 289 |
| Jammu & Kashmir  | Anantnag       | 82  | 292 | 162 | 321 |

|                 |                   |     |     |     |     |
|-----------------|-------------------|-----|-----|-----|-----|
| Jammu & Kashmir | Srinagar          | 202 | 255 | 103 | 381 |
| Jammu & Kashmir | Kathua            | 395 | 357 | 304 | 393 |
| Jammu & Kashmir | Kupwara           | 336 | 353 | 243 | 415 |
| Jammu & Kashmir | Kargil            | 117 | 478 | 270 | 498 |
| Jammu & Kashmir | Leh(Ladakh)       | 299 | 434 | 209 | 525 |
| Jammu & Kashmir | Baramulla         | 356 | 448 | 229 | 529 |
| Jammu & Kashmir | Jammu             | 498 | 366 | 111 | 552 |
| Jharkhand       | Godda             | 111 | 367 | 547 | 60  |
| Jharkhand       | Pakur             | 132 | 474 | 568 | 96  |
| Jharkhand       | Sahibganj         | 98  | 426 | 539 | 115 |
| Jharkhand       | Bokaro            | 54  | 444 | 516 | 140 |
| Jharkhand       | Gumla             | 329 | 518 | 571 | 168 |
| Jharkhand       | West Singbhum     | 428 | 499 | 570 | 170 |
| Jharkhand       | Lohardaga         | 280 | 506 | 563 | 205 |
| Jharkhand       | East Singbhum     | 399 | 437 | 542 | 209 |
| Jharkhand       | Palamu            | 217 | 453 | 519 | 220 |
| Jharkhand       | Giridish          | 320 | 445 | 517 | 242 |
| Jharkhand       | Dumka             | 414 | 497 | 560 | 243 |
| Jharkhand       | Garhwa            | 238 | 462 | 509 | 256 |
| Jharkhand       | Chtra             | 271 | 508 | 541 | 281 |
| Jharkhand       | Ranchi            | 310 | 428 | 475 | 298 |
| Jharkhand       | Dhanbad           | 368 | 430 | 483 | 306 |
| Jharkhand       | Deoghar           | 290 | 433 | 466 | 311 |
| Jharkhand       | Hazaribag         | 198 | 483 | 460 | 368 |
| Jharkhand       | Koderma           | 307 | 476 | 446 | 390 |
| Karnataka       | Bijapur           | 4   | 91  | 424 | 7   |
| Karnataka       | Gulbarga          | 7   | 203 | 461 | 11  |
| Karnataka       | Gadag             | 11  | 122 | 389 | 13  |
| Karnataka       | Bagalkot          | 3   | 108 | 244 | 16  |
| Karnataka       | Raichur           | 28  | 139 | 404 | 17  |
| Karnataka       | Chitradurga       | 88  | 131 | 411 | 24  |
| Karnataka       | Haveri            | 64  | 181 | 400 | 32  |
| Karnataka       | Bidar             | 161 | 156 | 435 | 35  |
| Karnataka       | Davanagere        | 103 | 140 | 287 | 69  |
| Karnataka       | Bangalore (Rural) | 216 | 192 | 327 | 89  |
| Karnataka       | Tumkur            | 365 | 183 | 359 | 90  |
| Karnataka       | Koppal            | 129 | 224 | 319 | 100 |
| Karnataka       | Dharwad           | 179 | 248 | 346 | 108 |
| Karnataka       | Chamarajanagar    | 78  | 259 | 315 | 112 |
| Karnataka       | Kolar             | 516 | 180 | 367 | 146 |
| Karnataka       | Bellary           | 164 | 240 | 296 | 149 |
| Karnataka       | Belgaum           | 66  | 219 | 179 | 179 |
| Karnataka       | Mysore            | 74  | 272 | 224 | 199 |
| Karnataka       | Mandya            | 62  | 198 | 125 | 227 |
| Karnataka       | Bangalore (Urban) | 185 | 273 | 137 | 356 |
| Karnataka       | Hassan            | 221 | 391 | 241 | 444 |
| Karnataka       | Chikmagalur       | 276 | 502 | 313 | 519 |

|                |                         |     |     |     |     |
|----------------|-------------------------|-----|-----|-----|-----|
| Karnataka      | Uttara Kannada          | 337 | 519 | 352 | 524 |
| Karnataka      | Kodagu / Coorgu         | 241 | 533 | 251 | 556 |
| Karnataka      | Udupi                   | 510 | 486 | 194 | 566 |
| Karnataka      | Dakshina Kannada        | 504 | 464 | 116 | 568 |
| Karnataka      | Shimoga                 | 289 | 526 | 128 | 570 |
| Kerala         | Thiruvananthapuram      | 495 | 189 | 226 | 254 |
| Kerala         | Malappuram              | 260 | 307 | 242 | 310 |
| Kerala         | Kollam                  | 437 | 270 | 240 | 314 |
| Kerala         | Kozhikode               | 424 | 298 | 261 | 333 |
| Kerala         | Wayanad                 | 104 | 392 | 322 | 348 |
| Kerala         | Kasaragod               | 418 | 268 | 196 | 350 |
| Kerala         | Kannur                  | 330 | 332 | 264 | 363 |
| Kerala         | Kottayam                | 246 | 317 | 170 | 396 |
| Kerala         | Alappuzha               | 296 | 205 | 70  | 403 |
| Kerala         | Idukki                  | 425 | 385 | 306 | 438 |
| Kerala         | Palakkad                | 100 | 349 | 142 | 439 |
| Kerala         | Thrissur                | 190 | 322 | 87  | 486 |
| Kerala         | Pathanamthitta          | 491 | 381 | 250 | 497 |
| Kerala         | Ernakulam               | 359 | 376 | 171 | 511 |
| Madhya Pradesh | Jhabua                  | 529 | 254 | 533 | 58  |
| Madhya Pradesh | Rajgarh                 | 65  | 212 | 328 | 64  |
| Madhya Pradesh | Mandsaur                | 270 | 160 | 364 | 71  |
| Madhya Pradesh | Shajapur                | 143 | 229 | 371 | 74  |
| Madhya Pradesh | Dindori                 | 149 | 469 | 569 | 80  |
| Madhya Pradesh | Ratlam                  | 389 | 146 | 341 | 82  |
| Madhya Pradesh | Dhar                    | 304 | 184 | 344 | 85  |
| Madhya Pradesh | Sidhi                   | 72  | 383 | 507 | 86  |
| Madhya Pradesh | Vidisha                 | 49  | 324 | 428 | 88  |
| Madhya Pradesh | Shivpuri                | 254 | 287 | 443 | 99  |
| Madhya Pradesh | Ujjain                  | 348 | 190 | 342 | 101 |
| Madhya Pradesh | Bhind                   | 300 | 166 | 311 | 103 |
| Madhya Pradesh | Barwani                 | 339 | 261 | 413 | 105 |
| Madhya Pradesh | Shahdol                 | 76  | 419 | 522 | 114 |
| Madhya Pradesh | Rewa                    | 210 | 328 | 447 | 135 |
| Madhya Pradesh | Mandla                  | 89  | 470 | 553 | 136 |
| Madhya Pradesh | Dewas                   | 110 | 295 | 356 | 137 |
| Madhya Pradesh | Neemuch                 | 214 | 250 | 320 | 147 |
| Madhya Pradesh | Khargone(West<br>Nimar) | 253 | 263 | 337 | 154 |
| Madhya Pradesh | Betul                   | 114 | 373 | 472 | 157 |
| Madhya Pradesh | Guna                    | 172 | 306 | 374 | 159 |
| Madhya Pradesh | Sehore                  | 73  | 325 | 358 | 166 |
| Madhya Pradesh | Umaria                  | 86  | 460 | 526 | 171 |
| Madhya Pradesh | Damoh                   | 55  | 399 | 452 | 177 |
| Madhya Pradesh | Panna                   | 173 | 389 | 477 | 180 |
| Madhya Pradesh | Satna                   | 159 | 321 | 357 | 189 |
| Madhya Pradesh | Chhatarpur              | 196 | 345 | 417 | 202 |

|                |                     |     |     |     |     |
|----------------|---------------------|-----|-----|-----|-----|
| Madhya Pradesh | Datia               | 209 | 197 | 190 | 210 |
| Madhya Pradesh | Chhindwara          | 140 | 371 | 439 | 218 |
| Madhya Pradesh | Katni               | 121 | 380 | 437 | 222 |
| Madhya Pradesh | Seoni               | 126 | 440 | 480 | 248 |
| Madhya Pradesh | Morena              | 322 | 236 | 208 | 258 |
| Madhya Pradesh | Sheopur Kalan       | 394 | 326 | 368 | 265 |
| Madhya Pradesh | Raisen              | 152 | 388 | 409 | 266 |
| Madhya Pradesh | Bhopal              | 44  | 313 | 197 | 268 |
| Madhya Pradesh | Khandwa(East Nimar) | 194 | 337 | 330 | 277 |
| Madhya Pradesh | Tikamgarh           | 266 | 327 | 317 | 278 |
| Madhya Pradesh | Indore              | 409 | 148 | 139 | 292 |
| Madhya Pradesh | Sagar               | 170 | 386 | 394 | 295 |
| Madhya Pradesh | Narsinghpur         | 107 | 361 | 283 | 349 |
| Madhya Pradesh | Jabalpur            | 91  | 375 | 277 | 362 |
| Madhya Pradesh | Gwalior             | 263 | 315 | 195 | 374 |
| Madhya Pradesh | Harda               | 32  | 441 | 252 | 418 |
| Madhya Pradesh | Balaghat            | 193 | 513 | 393 | 471 |
| Madhya Pradesh | Hoshangabad         | 41  | 458 | 132 | 531 |
| Maharashtra    | Solapur             | 2   | 121 | 299 | 12  |
| Maharashtra    | Beed                | 192 | 132 | 429 | 30  |
| Maharashtra    | Ahmednagar          | 35  | 104 | 297 | 31  |
| Maharashtra    | Osmanabad           | 40  | 210 | 378 | 42  |
| Maharashtra    | Latur               | 201 | 196 | 423 | 48  |
| Maharashtra    | Nandurbar           | 87  | 318 | 473 | 63  |
| Maharashtra    | Sangli              | 52  | 158 | 257 | 72  |
| Maharashtra    | Buldhana            | 286 | 234 | 408 | 76  |
| Maharashtra    | Dhule               | 379 | 201 | 387 | 83  |
| Maharashtra    | Nasik               | 141 | 225 | 331 | 95  |
| Maharashtra    | Jalna               | 472 | 221 | 407 | 106 |
| Maharashtra    | Amravati            | 268 | 282 | 418 | 113 |
| Maharashtra    | Akola               | 349 | 252 | 381 | 128 |
| Maharashtra    | Aurangabad          | 458 | 245 | 390 | 141 |
| Maharashtra    | Jalgaon             | 281 | 222 | 312 | 145 |
| Maharashtra    | Parbhani            | 519 | 262 | 431 | 165 |
| Maharashtra    | Washim              | 488 | 299 | 426 | 182 |
| Maharashtra    | Nanded              | 496 | 312 | 406 | 239 |
| Maharashtra    | Pune                | 90  | 310 | 210 | 283 |
| Maharashtra    | Hingoli             | 526 | 308 | 380 | 293 |
| Maharashtra    | Yavatmal            | 551 | 354 | 451 | 354 |
| Maharashtra    | Wardha              | 459 | 346 | 345 | 355 |
| Maharashtra    | Satara              | 146 | 348 | 246 | 361 |
| Maharashtra    | Nagpur              | 372 | 347 | 308 | 367 |
| Maharashtra    | Raigad              | 318 | 465 | 382 | 443 |
| Maharashtra    | Thane               | 222 | 473 | 360 | 453 |
| Maharashtra    | Gondia              | 199 | 446 | 305 | 464 |
| Maharashtra    | Ratnagiri           | 181 | 516 | 392 | 468 |
| Maharashtra    | Gadchiroli          | 295 | 546 | 469 | 478 |

|             |                      |     |     |     |     |
|-------------|----------------------|-----|-----|-----|-----|
| Maharashtra | Bhandara             | 378 | 413 | 280 | 480 |
| Maharashtra | Sindhudurg           | 256 | 500 | 349 | 493 |
| Maharashtra | Kolhapur             | 235 | 424 | 214 | 508 |
| Maharashtra | Chandrapur           | 486 | 492 | 373 | 518 |
| Manipur     | Churachandpur        | 314 | 491 | 546 | 251 |
| Manipur     | Chandel              | 188 | 534 | 557 | 273 |
| Manipur     | Ukhrul               | 163 | 531 | 535 | 303 |
| Manipur     | Senapati             | 327 | 521 | 512 | 370 |
| Manipur     | Tamenglong           | 417 | 558 | 566 | 391 |
| Manipur     | Imphal East          | 269 | 449 | 340 | 447 |
| Manipur     | Imphal West          | 476 | 452 | 293 | 526 |
| Manipur     | Thoubal              | 401 | 406 | 152 | 540 |
| Manipur     | Bishnupur            | 386 | 487 | 223 | 548 |
| Meghalaya   | South Garo Hills     | 400 | 511 | 554 | 294 |
| Meghalaya   | West Garo Hills      | 412 | 512 | 521 | 366 |
| Meghalaya   | East Garo Hills      | 490 | 495 | 511 | 371 |
| Meghalaya   | West Khasi Hills     | 215 | 541 | 492 | 431 |
| Meghalaya   | Jaintia Hills        | 182 | 547 | 444 | 484 |
| Meghalaya   | East Khasi Hills     | 229 | 548 | 366 | 536 |
| Meghalaya   | Ri-Bhoi              | 422 | 549 | 388 | 543 |
| Mizoram     | Champhai             | 157 | 505 | 498 | 316 |
| Mizoram     | Saiha                | 465 | 514 | 536 | 352 |
| Mizoram     | Lawngtlai            | 506 | 529 | 561 | 359 |
| Mizoram     | Mamit                | 226 | 550 | 528 | 378 |
| Mizoram     | Serchhip             | 332 | 515 | 486 | 400 |
| Mizoram     | Lunglei              | 446 | 530 | 518 | 409 |
| Mizoram     | Kolasib              | 30  | 551 | 448 | 417 |
| Mizoram     | Aizawl               | 142 | 525 | 430 | 442 |
| Nagaland    | Mon                  | 441 | 539 | 530 | 402 |
| Nagaland    | Tuensang             | 477 | 543 | 520 | 437 |
| Nagaland    | Wokha                | 167 | 554 | 495 | 452 |
| Nagaland    | Phek                 | 294 | 544 | 455 | 488 |
| Nagaland    | Zunheboto            | 351 | 552 | 468 | 500 |
| Nagaland    | Kohima               | 136 | 556 | 433 | 514 |
| Nagaland    | Mokokchung           | 406 | 555 | 458 | 534 |
| Nagaland    | Dimapur              | 95  | 485 | 182 | 535 |
| Orissa      | Nuapada              | 347 | 438 | 537 | 197 |
| Orissa      | Kalahandi            | 338 | 459 | 525 | 253 |
| Orissa      | Bolangir             | 461 | 425 | 514 | 261 |
| Orissa      | Phulbani (Kandhamal) | 342 | 537 | 565 | 279 |
| Orissa      | Keonjhar             | 470 | 398 | 484 | 284 |
| Orissa      | Gajapati             | 535 | 431 | 543 | 297 |
| Orissa      | Nabarangpur          | 503 | 510 | 559 | 315 |
| Orissa      | Puri                 | 101 | 300 | 167 | 332 |
| Orissa      | Mayurbhanj           | 388 | 457 | 488 | 341 |
| Orissa      | Kendrapara           | 508 | 311 | 316 | 344 |
| Orissa      | Sundargarh           | 361 | 503 | 502 | 358 |

|             |                           |     |     |     |     |
|-------------|---------------------------|-----|-----|-----|-----|
| Orissa      | Malkangiri                | 549 | 524 | 562 | 382 |
| Orissa      | Deogarh                   | 433 | 523 | 510 | 395 |
| Orissa      | Bhadrak                   | 420 | 291 | 169 | 401 |
| Orissa      | Jagatsingpur              | 559 | 177 | 172 | 408 |
| Orissa      | Baragarh                  | 468 | 418 | 402 | 410 |
| Orissa      | Koraput                   | 537 | 535 | 558 | 413 |
| Orissa      | Sonepur                   | 303 | 439 | 377 | 422 |
| Orissa      | Dhenkanal                 | 445 | 454 | 436 | 424 |
| Orissa      | Jharsuguda                | 469 | 468 | 454 | 429 |
| Orissa      | Rayagada                  | 528 | 545 | 556 | 430 |
| Orissa      | Nayagarh                  | 454 | 450 | 419 | 433 |
| Orissa      | Sambalpur                 | 421 | 520 | 471 | 455 |
| Orissa      | Balasore (Baleshwar)      | 521 | 303 | 183 | 456 |
| Orissa      | Boudh                     | 523 | 507 | 479 | 470 |
| Orissa      | Jajpur                    | 462 | 336 | 184 | 473 |
| Orissa      | Angul                     | 530 | 504 | 481 | 475 |
| Orissa      | Ganjam                    | 545 | 382 | 295 | 513 |
| Orissa      | Khurda                    | 522 | 435 | 221 | 550 |
| Orissa      | Cuttack                   | 483 | 393 | 131 | 553 |
| Pondicherry | Pondicherry               | 487 | 288 | 13  | 567 |
| Punjab      | Faridkot                  | 513 | 2   | 23  | 91  |
| Punjab      | Moga                      | 524 | 1   | 15  | 121 |
| Punjab      | Kapurthala                | 455 | 3   | 19  | 156 |
| Punjab      | Mansa                     | 555 | 9   | 39  | 225 |
| Punjab      | Firozpur                  | 539 | 6   | 28  | 229 |
| Punjab      | Sangrur                   | 527 | 5   | 11  | 274 |
| Punjab      | Muktsar                   | 550 | 31  | 55  | 280 |
| Punjab      | Bathinda                  | 540 | 18  | 32  | 291 |
| Punjab      | Jalandhar                 | 525 | 4   | 2   | 336 |
| Punjab      | Fathegarh Sahib           | 499 | 10  | 3   | 345 |
| Punjab      | Shahid Bhagat Singh Nagar | 440 | 44  | 14  | 414 |
| Punjab      | Patiala                   | 514 | 26  | 6   | 421 |
| Punjab      | Hoshiarpur                | 443 | 93  | 29  | 425 |
| Punjab      | Amritsar                  | 415 | 51  | 7   | 445 |
| Punjab      | Ludhiana                  | 532 | 11  | 1   | 458 |
| Punjab      | Rupnagar                  | 377 | 161 | 30  | 485 |
| Punjab      | Gurdaspur                 | 502 | 80  | 10  | 506 |
| Rajasthan   | Barmer                    | 169 | 16  | 550 | 1   |
| Rajasthan   | Jaisalmer                 | 68  | 24  | 527 | 2   |
| Rajasthan   | Jodhpur                   | 134 | 8   | 474 | 3   |
| Rajasthan   | Bikaner                   | 166 | 23  | 508 | 4   |
| Rajasthan   | Nagaur                    | 311 | 20  | 489 | 5   |
| Rajasthan   | Jalore                    | 463 | 29  | 442 | 9   |
| Rajasthan   | Churu                     | 509 | 47  | 504 | 10  |
| Rajasthan   | Pali                      | 297 | 74  | 464 | 14  |
| Rajasthan   | Tonk                      | 183 | 96  | 434 | 19  |

|            |                  |     |     |     |     |
|------------|------------------|-----|-----|-----|-----|
| Rajasthan  | Ajmer            | 236 | 85  | 420 | 20  |
| Rajasthan  | Sirohi           | 127 | 83  | 365 | 23  |
| Rajasthan  | Dungarpur        | 168 | 171 | 467 | 25  |
| Rajasthan  | Rajsamand        | 205 | 92  | 383 | 26  |
| Rajasthan  | Banswara         | 252 | 211 | 482 | 33  |
| Rajasthan  | Hanumangarh      | 554 | 49  | 416 | 40  |
| Rajasthan  | Sikar            | 552 | 30  | 329 | 41  |
| Rajasthan  | Bhilwara         | 288 | 143 | 422 | 44  |
| Rajasthan  | Jhunjhunu        | 556 | 27  | 294 | 52  |
| Rajasthan  | Sawai Madhopur   | 301 | 112 | 338 | 57  |
| Rajasthan  | Udaipur          | 346 | 186 | 432 | 59  |
| Rajasthan  | Jaipur           | 497 | 55  | 265 | 62  |
| Rajasthan  | Jhalawar         | 144 | 179 | 336 | 67  |
| Rajasthan  | Chittorgarh      | 160 | 191 | 350 | 68  |
| Rajasthan  | Dausa            | 475 | 73  | 256 | 75  |
| Rajasthan  | Bharatpur        | 410 | 64  | 192 | 92  |
| Rajasthan  | Ganganagar       | 534 | 67  | 249 | 118 |
| Rajasthan  | Bundi            | 326 | 119 | 232 | 119 |
| Rajasthan  | Dholpur          | 413 | 98  | 219 | 126 |
| Rajasthan  | Alwar            | 494 | 58  | 149 | 138 |
| Rajasthan  | Karauli          | 480 | 167 | 324 | 144 |
| Rajasthan  | Baran            | 292 | 193 | 218 | 190 |
| Rajasthan  | Kota             | 285 | 199 | 108 | 342 |
| Sikkim     | South            | 113 | 522 | 412 | 440 |
| Sikkim     | North            | 18  | 563 | 462 | 441 |
| Sikkim     | West             | 283 | 540 | 403 | 517 |
| Sikkim     | East             | 232 | 532 | 290 | 545 |
| Tamil Nadu | Perambalur       | 16  | 154 | 323 | 28  |
| Tamil Nadu | Ariyalur         | 8   | 172 | 272 | 39  |
| Tamil Nadu | Salem            | 15  | 114 | 135 | 70  |
| Tamil Nadu | Namakkal         | 12  | 213 | 198 | 78  |
| Tamil Nadu | Dharmapuri       | 34  | 264 | 318 | 84  |
| Tamil Nadu | Ramanathapuram   | 479 | 130 | 333 | 104 |
| Tamil Nadu | Villupuram       | 6   | 247 | 115 | 158 |
| Tamil Nadu | Thiruvannamalai  | 10  | 280 | 146 | 176 |
| Tamil Nadu | Karur            | 17  | 285 | 173 | 192 |
| Tamil Nadu | Thiruvarur       | 56  | 103 | 67  | 206 |
| Tamil Nadu | Dindigul         | 138 | 241 | 204 | 217 |
| Tamil Nadu | Thanjavur        | 22  | 113 | 42  | 234 |
| Tamil Nadu | Coimbatore       | 80  | 144 | 101 | 235 |
| Tamil Nadu | Vellore          | 23  | 289 | 161 | 238 |
| Tamil Nadu | Cuddalore        | 9   | 238 | 59  | 257 |
| Tamil Nadu | Erode            | 25  | 265 | 110 | 263 |
| Tamil Nadu | Thoothukudi      | 558 | 102 | 211 | 269 |
| Tamil Nadu | Nagapattinam     | 165 | 182 | 99  | 307 |
| Tamil Nadu | Madurai          | 14  | 258 | 57  | 322 |
| Tamil Nadu | Thiruchirappalli | 26  | 251 | 68  | 325 |

|               |                 |     |     |     |     |
|---------------|-----------------|-----|-----|-----|-----|
| Tamil Nadu    | Kanyakumari     | 548 | 141 | 133 | 387 |
| Tamil Nadu    | Pudukkottai     | 42  | 290 | 71  | 394 |
| Tamil Nadu    | Theni           | 533 | 220 | 163 | 405 |
| Tamil Nadu    | Sivagangai      | 225 | 276 | 97  | 426 |
| Tamil Nadu    | The Nilgiris    | 102 | 490 | 332 | 461 |
| Tamil Nadu    | Virudhunagar    | 563 | 244 | 191 | 481 |
| Tamil Nadu    | Thirunelveli    | 543 | 165 | 62  | 492 |
| Tamil Nadu    | Thiruvallur     | 133 | 286 | 37  | 507 |
| Tamil Nadu    | Kancheepuram    | 50  | 309 | 24  | 521 |
| Tripura       | Dhalai          | 408 | 481 | 405 | 459 |
| Tripura       | South Tripura   | 230 | 421 | 225 | 499 |
| Tripura       | North Tripura   | 467 | 475 | 300 | 533 |
| Tripura       | West Tripura    | 375 | 415 | 127 | 554 |
| Uttar Pradesh | Mahoba          | 350 | 187 | 478 | 36  |
| Uttar Pradesh | Chitrakut       | 224 | 301 | 534 | 37  |
| Uttar Pradesh | Banda           | 233 | 142 | 438 | 38  |
| Uttar Pradesh | Hamirpur        | 335 | 155 | 441 | 46  |
| Uttar Pradesh | Ballia          | 79  | 50  | 154 | 49  |
| Uttar Pradesh | Bahraich        | 435 | 111 | 348 | 65  |
| Uttar Pradesh | Kaushambi       | 244 | 115 | 291 | 73  |
| Uttar Pradesh | Mathura         | 457 | 19  | 90  | 87  |
| Uttar Pradesh | Deoria          | 171 | 46  | 107 | 93  |
| Uttar Pradesh | Shravasti       | 382 | 267 | 445 | 97  |
| Uttar Pradesh | Jhansi          | 203 | 170 | 302 | 98  |
| Uttar Pradesh | Siddharth Nagar | 402 | 101 | 236 | 110 |
| Uttar Pradesh | Bagpat          | 316 | 14  | 41  | 117 |
| Uttar Pradesh | Lalitpur        | 131 | 293 | 384 | 120 |
| Uttar Pradesh | Budaun          | 345 | 76  | 165 | 122 |
| Uttar Pradesh | Gonda           | 367 | 86  | 189 | 125 |
| Uttar Pradesh | Balrampur       | 323 | 235 | 339 | 133 |
| Uttar Pradesh | Ghazipur        | 124 | 95  | 120 | 152 |
| Uttar Pradesh | Sonbhadra       | 139 | 387 | 493 | 155 |
| Uttar Pradesh | Fatehpur        | 248 | 163 | 213 | 172 |
| Uttar Pradesh | Mau             | 106 | 89  | 85  | 181 |
| Uttar Pradesh | Rae-Bareilly    | 259 | 124 | 156 | 185 |
| Uttar Pradesh | Basti           | 343 | 107 | 147 | 191 |
| Uttar Pradesh | Kushi Nagar     | 319 | 118 | 150 | 201 |
| Uttar Pradesh | Shahjahanpur    | 370 | 87  | 121 | 203 |
| Uttar Pradesh | Jalaun          | 360 | 206 | 233 | 212 |
| Uttar Pradesh | Agra            | 482 | 38  | 65  | 214 |
| Uttar Pradesh | Jaunpur         | 366 | 71  | 88  | 219 |
| Uttar Pradesh | Faizabad        | 387 | 54  | 61  | 224 |
| Uttar Pradesh | Maharajganj     | 242 | 153 | 164 | 228 |
| Uttar Pradesh | Mirzapur        | 187 | 274 | 259 | 232 |
| Uttar Pradesh | Hardoi          | 362 | 128 | 155 | 236 |
| Uttar Pradesh | Kanpur (Dehat)  | 404 | 147 | 178 | 244 |
| Uttar Pradesh | Aligarh         | 213 | 63  | 43  | 247 |

|               |                    |     |     |     |     |
|---------------|--------------------|-----|-----|-----|-----|
| Uttar Pradesh | Pratapgarh         | 191 | 178 | 144 | 249 |
| Uttar Pradesh | Sant Ravidas Nagar | 282 | 70  | 58  | 250 |
| Uttar Pradesh | Sant Kabir Nagar   | 334 | 164 | 158 | 259 |
| Uttar Pradesh | Hathras            | 473 | 42  | 51  | 267 |
| Uttar Pradesh | Farrukhabad        | 369 | 84  | 75  | 275 |
| Uttar Pradesh | Azamgarh           | 178 | 127 | 89  | 276 |
| Uttar Pradesh | Allahabad          | 212 | 168 | 122 | 282 |
| Uttar Pradesh | Muzaffarnagar      | 426 | 41  | 33  | 296 |
| Uttar Pradesh | Unnao              | 306 | 150 | 117 | 299 |
| Uttar Pradesh | Jyotiba Phulenagar | 325 | 110 | 81  | 300 |
| Uttar Pradesh | Gorakhpur          | 234 | 138 | 91  | 301 |
| Uttar Pradesh | Varanasi           | 298 | 40  | 22  | 304 |
| Uttar Pradesh | Etah               | 481 | 97  | 93  | 313 |
| Uttar Pradesh | Saharanpur         | 447 | 57  | 40  | 317 |
| Uttar Pradesh | Auraiya            | 452 | 134 | 126 | 318 |
| Uttar Pradesh | Kannauj            | 429 | 99  | 80  | 319 |
| Uttar Pradesh | Bareilly           | 432 | 105 | 86  | 326 |
| Uttar Pradesh | Ambedkar Nagar     | 305 | 133 | 84  | 335 |
| Uttar Pradesh | Sitapur            | 353 | 151 | 102 | 338 |
| Uttar Pradesh | Sultanpur          | 392 | 145 | 98  | 343 |
| Uttar Pradesh | Etawah             | 381 | 157 | 104 | 347 |
| Uttar Pradesh | Kheri              | 464 | 204 | 140 | 353 |
| Uttar Pradesh | Firozabad          | 411 | 90  | 47  | 369 |
| Uttar Pradesh | Bijnor             | 262 | 185 | 72  | 375 |
| Uttar Pradesh | Pilibhit           | 438 | 162 | 92  | 377 |
| Uttar Pradesh | Barabanki          | 189 | 227 | 82  | 379 |
| Uttar Pradesh | Mainpuri           | 485 | 117 | 64  | 380 |
| Uttar Pradesh | Gautam Buddh Nagar | 363 | 88  | 31  | 383 |
| Uttar Pradesh | Bulandshahar       | 405 | 109 | 48  | 386 |
| Uttar Pradesh | Chandauli          | 355 | 239 | 109 | 389 |
| Uttar Pradesh | Moradabad          | 397 | 149 | 66  | 392 |
| Uttar Pradesh | Lucknow            | 258 | 159 | 54  | 398 |
| Uttar Pradesh | Rampur             | 450 | 195 | 77  | 428 |
| Uttar Pradesh | Kanpur City        | 284 | 216 | 53  | 450 |
| Uttar Pradesh | Ghaziabad          | 344 | 68  | 5   | 469 |
| Uttar Pradesh | Meerut             | 287 | 116 | 4   | 530 |
| Uttarakhand   | Bageshwar          | 45  | 335 | 496 | 53  |
| Uttarakhand   | Tehri Garwal       | 279 | 344 | 538 | 66  |
| Uttarakhand   | Chamoli            | 46  | 395 | 515 | 79  |
| Uttarakhand   | Almora             | 118 | 403 | 513 | 130 |
| Uttarakhand   | Pithoragarh        | 59  | 467 | 523 | 163 |
| Uttarakhand   | Champawat          | 264 | 466 | 548 | 198 |
| Uttarakhand   | Rudraprayag        | 60  | 422 | 463 | 208 |
| Uttarakhand   | Uttarkashi         | 93  | 488 | 494 | 270 |
| Uttarakhand   | Pauri Garhwal      | 358 | 489 | 499 | 346 |
| Uttarakhand   | Haridwar           | 384 | 246 | 52  | 491 |
| Uttarakhand   | Dehardun           | 430 | 482 | 239 | 544 |

|             |                      |     |     |     |     |
|-------------|----------------------|-----|-----|-----|-----|
| Uttarakhand | Nainital             | 251 | 536 | 262 | 555 |
| Uttarakhand | Udham Singh Nagar    | 398 | 340 | 35  | 563 |
| West Bengal | Malda                | 37  | 129 | 174 | 94  |
| West Bengal | Purulia              | 471 | 384 | 497 | 237 |
| West Bengal | Dinajpur (Uttar)     | 57  | 202 | 113 | 241 |
| West Bengal | Murshidabad          | 120 | 106 | 69  | 252 |
| West Bengal | Nadia                | 135 | 59  | 25  | 271 |
| West Bengal | Dinajpur (Dakshin)   | 58  | 323 | 207 | 286 |
| West Bengal | 24-Paraganas (South) | 403 | 260 | 217 | 308 |
| West Bengal | Howrah               | 423 | 82  | 56  | 328 |
| West Bengal | Cooch Behar          | 184 | 215 | 106 | 337 |
| West Bengal | 24-Paraganas (North) | 317 | 100 | 45  | 357 |
| West Bengal | Midnapore            | 511 | 242 | 141 | 420 |
| West Bengal | Birbhum              | 449 | 304 | 143 | 454 |
| West Bengal | Jalpaiguri           | 208 | 356 | 180 | 463 |
| West Bengal | Darjeeling           | 94  | 484 | 309 | 465 |
| West Bengal | Hooghly              | 371 | 81  | 12  | 474 |
| West Bengal | Bankura              | 505 | 370 | 228 | 509 |
| West Bengal | Burdwan              | 434 | 253 | 27  | 542 |

**ANNEXURE-III**  
**[Part (d) to Lok Sabha SQ No.22 for 01/12/2015]**

**The high yielding varieties that can withstand severe change in weather pattern including deficient rainfall/drought and varieties suitable for biotic and abiotic stresses**

**Food Crops**

| Varieties  | Traits  | Zone / State   |
|--|---|--|
| <b>Rice</b>  |   |  |
| Hybrid 6129  | Resistant to Blast, brown spot and brown plant hopper   | Irrigated areas of Punjab & Tamil Nadu   |
| Improved Samba Mahsuri   | Resistant to bacterial blight   | Irrigated/shallow lowlands of Andhra Pradesh, Chhattisgarh, Jharkhand, Orissa, Bihar, Gujarat, Maharashtra |
| Improved Pusa Basmati 1  | Resistant to blast  | Basmati-growing areas of Delhi, Punjab, Jammu and Kashmir, Uttarakhand                                     |
| SahabhagiDhan, Vandana, Anjali, Satyabhama, DRR Dhan 42, BirsaVikasDhan 203, BirsaVikasDhan 111, RajendraBhagwati, JaldiDhan 6, IR64 Drt I | Drought tolerance   | Upland rice areas  |
| CSR 27, CSR 30, CSR 36, NarendarUshar, Shankar Dhan 3, Lunishri  | Salinity stress tolerance   | Inland Saline areas  |
| CR Dhan 402, CR Dhan 403   | Salinity stress tolerance   | Coastal areas  |
| Swarna Sub1, Savitri Sub1, CR Dan 401 and Chakaakhi  | Submergence tolerance (can sustain flood and flash flood upto 7-12 days)                              | Flood prone shallow lands areas  |
| CR Dhan 500, Varshadhan, Hanseswari, CR Dhan 505, Jayantidhan, Jalamani and Durga  | Waterlogging condition upto 75 – 100 cm   | Flood prone shallow lands areas  |
| CR Dhan 201  | Moderately resistant to leaf blast, sheath rot, stem borer, leaf folder, whorl maggot and rice thrips | Chhattisgarh & Bihar under aerobic condition   |
| CR Dhan 202  | Moderately resistant to stem borer, leaf folder, whorl maggot and rice thrips                         | Jharkhand and Odisha under aerobic condition   |
| CR Dhan 407  | Moderate resistance to BLB, Leaf Blast  | Odisha and West Bengal under rainfed shallow lowlands  |
| CR Dhan 505  | Moderately resistant to leaf blast, sheath rot, sheath blight & rice tungro virus.                    | Odisha and Assam under deep water condition  |
| Pusa Basmati 1509  | Improved short duration basmati   | Western Uttar Pradesh and Delhi under irrigated transplanted condition                                     |
| <b>Wheat</b>   |   |  |
| PBW550   | Resistant to yellow rust  | Punjab, Haryana, West Uttar Pradesh (except Jhansi division)   |
| VL 892   | Medium fertility and restricted irrigation condition  | Hills of Himachal Pradesh and Uttarakhand  |
| HI 1544  | High fertility and irrigated conditions   | Madhya Pradesh, Rajasthan (Kota and Udaipur divisions) and Gujarat   |
| PBW 527  | Drought tolerance   | North west plains  |
| HI 1531, HI 1500, HI 8627  | Drought tolerance   | Central Zone   |
| HD 2888  | Drought tolerance   | Eastern India  |
| HPW 349, PBW 644, WH   | Drought tolerance   | Northern and central wheat growing areas   |

|   |   |   |
|---|---|---|
| 1080, HD 3043, PBW 396, K 9465, K 8962, MP 3288, HD 4672, NIAW 1415, HD 2987  |   |   |
| NIAW 34   | High temperature stress tolerance   | Peninsular zone late sown conditions  |
| Raj 3765  | High temperature stress tolerance   | North western plain for late sown conditions  |
| Raj 4037  | High temperature stress tolerance   | Peninsular India for normal sown conditions   |
| KRL 14, KRL 19, KRL 210, KRL 213  | Salinity stress tolerance   | Inland saline areas   |
| HD 2967   | Rusts resistance  | North Western Plain Zone and North Eastern Plain Zone   |
| Narendra Wheat 4018   | Resistant to brown rust and leaf blight                                       | Uttar Pradesh   |
| <b>Maize</b>  |   |   |
| QPM Hybrid HQPM7  | Quality protein single-cross hybrids  | Andhra Pradesh, Karnataka, Tamil Nadu and Maharashtra   |
| QPM Vivek 9   | Early maturing and quality protein  | Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Andhra Pradesh  |
| Buland  | High temperature stress tolerance   | Northern parts of India   |
| PMH 1   | High temperature stress tolerance   | Irrigated areas of Punjab   |
| PMH 3   | High temperature stress tolerance   | Northern parts of India   |
| HM 9  | High temperature stress tolerance   | Bihar, Jharkhand, Orissa  |
| Pusa hybrid Makka 1   | Drought tolerance   | Rajasthan, Gujarat, Madhya Pradesh  |
| HM 4  | Drought tolerance   | Punjab, Haryana, Uttar Pradesh, Andhra Pradesh, Maharashtra, Tamil Nadu and Goa                             |
| Pusa hybrid Makka 5   | Drought tolerance   | Whole of India  |
| DHM 121 (BH 41009)  | Medium maturity, yellow, semi-dent and tolerant to moisture stress conditions | Odisha, Bihar, Jharkhand, West Bengal, Gujarat, Rajasthan, Chhattisgarh and Madhya Pradesh in kharif season |
| HM-5, Seed Tech-2324, HM-10, PMH-2  | Deep water/submergence/water logging tolerance                                | Maize growing areas   |
| <b>Sorghum</b>  |   |   |
| CSH 25  | Dual purpose and tolerant to grain mold diseases                              | Maharashtra, Andhra Pradesh, Madhya Pradesh, Karnataka and Gujarat  |
| CSH 19 R, CSV 18  | Drought tolerance   | All rabi sorghum area   |
| CSH 15 R  | Drought tolerance   | Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu   |
| <b>Millets</b>  |   |   |
| <b>(i) Pearl Millet</b><br>HHB 67 improved, GHB 757, GHB 538, GHB 719, Dhanshakti, HHB 234, MandorBajra Composite 2, HHB-226, RHB-177, Pusa Composite 443 | Drought tolerance   | All dry areas of Western Rajasthan and Gujarat  |
| <b>(ii) Finger Millet</b><br>GPU 67, DHRS 1, PRM-2, KMr-301, VL Mandua 347,   | Drought tolerance   | Millets growing dry regions   |

|   |                   |                             |
|---|-------------------|-----------------------------|
| Indira Ragi-1, Dapoli safed-1, HIMA, KMR 204, VL Mandua-352 (VL352), Phule Nachani-1 (KOPN-235) |                   |                             |
| <b>(iii) Foxtail Millet</b><br>Sia 3085, SiA 3156   | Drought tolerance | Millets growing dry regions |
| <b>(iv) Barnyard Millet</b><br>CO(KV)2  | Drought tolerance | Millets growing dry regions |
| <b>(v) Kodo Millet</b><br>Indira Kodo-1   | Drought tolerance | Millets growing dry regions |
| <b>Barley</b>   |                   |                             |
| RD 2660, K603   | Drought tolerance | North west plains region    |

### Pulses

| Variety                                    | Trait  | Zone  |
|--|--|---|
| <b>Chickpea</b>                            |  |   |
| Karnal Chana                               | Tolerance to salinity                                | North West Plain Zone                           |
| CO1, ICCV 10                               | Drought tolerance                                    | Southern Zone                                   |
| Vijay, Vikas                               | Drought tolerance                                    | Central Zone                                    |
| RSG 14 , RSG 888                           | Drought tolerance                                    | North West Plain Zone                           |
| PKV Kabuli 4, IPCK 2004-29, Phule G 0517   | Extra large seeded Kabuli                            | Central Zone                                    |
| MNK 1                                      | Extra large seeded Kabuli                            | South Zone                                      |
| JG 6, JG 14                                | Resistance to wilt                                   | Central Zone                                    |
| DCP 92-3                                   | Lodging tolerance                                    | Central Zone                                    |
| GNG 16                                     | Lodging tolerance                                    | North West Plain Zone                           |
| <b>Pigeonpea</b>                           |  |   |
| BSMR 736, BSMR 175, Asha                   | Wilt/Sterility mosaic disease tolerance              | Central Zone                                    |
| NDA 1, MAL 13                              | Wilt/Sterility mosaic disease tolerance              | North East Plain Zone                           |
| Pusa 992, PA 291, PAU 881                  | Short duration suitable for multiple cropping        | North west plain Zone                           |
| <b>Mungbean</b>                            |  |   |
| HUM 1                                      | Yellow mosaic virus tolerance                        | Central and Southern Zone                       |
| CO6  | Yellow mosaic virus tolerance                        | South Zone                                      |
| IPM 02-3                                   | Yellow mosaic virus tolerance                        | North East Plain Zone                           |
| Samrat, IPM 2-3, Meha, SML 668             | Early maturing suitable for spring/summer            | North west plain zone and North East Plain zone |
| IPM2-14, TM96-2, LGG 460, LGG 410          | Resistant to powdery mildew suitable for rabi/spring | South Zone                                      |
| <b>Urdbean</b>                             |  |   |
| WBU 109, PantU31, Azad Urd 1               | Short duration suitable for multiple cropping        | North East Plain zone                           |
| IPU-02-43, LBG 625, Vamban 4, WBG 26       | Resistant to powdery mildew suitable for rabi/spring | South Zone                                      |
| <b>Lentil</b>                              |  |   |
| HUL57,KLS218,PL8                           | Resistance to rust                                   | North East Plain Zone                           |
| DPL 62, PL 6, PL7, IPL 406, IPL 315,IPL316 | Large seeded   | Central Zone and North Western plain Zone       |

### Oilseeds

| Variety       | Trait | Zone |
|---------------|-------|------|
| <b>Castor</b> |       |      |

|  |  |                                     |
|--|--|-------------------------------------|
| DCH 519  | Resistance to wilt and leaf hoppers              | All castor growing zones            |
| GC 3   | Resistant to wilt                                | Gujarat                             |
| Jwala  | Tolerance to salinity and resistance to wilt     | All castor growing zones            |
| <b>Rapeseed Mustard</b>                            |  |                                     |
| NRCDR2   | High temperature tolerance                       | North West Plain Zone               |
| LET-18, Pusa Mustard 21, Pusa Mustard 24, RLC1     | Low erucic acid                                  | North West Plain Zone               |
| NRCDR 601  | High temperature and salinity tolerance          | North West Plain Zone               |
| VL toria 3   | Tolerance to cold                                | North Hill Zone                     |
| <b>Soybean</b>                                     |  |                                     |
| JS97-52  | Resistance to Yellow mosaic virus and collar rot | Central Zone and North Eastern Zone |
| NRC7   | Pod shattering resistance                        | All soybean growing zones           |
| SL668, JS 97-52                                    | Yellow mosaic resistance                         | All soybean growing zones           |
| NRC-7, JS 71-05                                    | Pod shattering and drought tolerance             | All soybean growing zones           |
| NARI 38, SSF 658                                   | Resistant to wilt                                | All castor growing zones            |
| JS 97-52, JS 20-38 and PK 472                      | Suitable for water logging condition.            | Soybean growing zones               |
| NRC 7, JS 95-60                                    | Drought tolerance                                | Soybean growing zones               |
| <b>Groundnut</b>                                   |  |                                     |
| Ajiya, Girnar1, TAG-24, GG20, Kadiri 6, ICGV 91114 | Drought Tolerance                                | Central and South zone              |
| Girnar2, Kadiri9, Kadiri, Haritandhra, Greeshma    | Short duration suitable for rabi/spring          | South Zone                          |

### Commercial Crops

| Variety/Hybrid   | Traits  | Zone  |
|--|---|---|
| <b>Cotton</b>  |   |   |
| HD 324   | Tolerance to Fusarium wilt and Leaf curl virus    | North Zone                                  |
| Hybrid Kalyan  | Tolerant to Cotton Leaf curl virus                | North zone                                  |
| G.Cot.Hy 12  | Tolerant to aphids and jassids                    | Central Zone                                |
| LRA 5166   | Tolerance to drought                              | Central Zone                                |
| KC 3   | Tolerance to drought                              | South Zone                                  |
| Kanchana, L - 604  | Resistance to whitefly                            | South Zone                                  |
| MCU 5 VT, Surabhi  | Resistance to verticillium wilt                   | South zone                                  |
| Suraj  | Long staple with jassid tolerance                 | South and Central zone irrigated conditions |
| HD 324, CICR-1, Raj DH 7, Jawahar Tapti, PratapKapi, Suraj, Surabhi, Veena, AK 235 | Drought Tolerant                                  | Cotton growing areas                        |
| <b>Sugarcane</b>   |   |   |
| Co 94008 (Shyama)  | Tolerant to drought and salinity                  | Peninsular Zone                             |
| Co 2001-3 (Sulabh)   | Moderately resistant to red rot, smut and wilt    | Peninsular Zone                             |
| Co 98014 (Karan-1)   | Tolerant to drought, water-logging                | North West Zone                             |
| CoS 96268 (Mithas)   | Moderately resistant to red rot and good ratooner | North West Zone                             |
| CoSe 6436 (Jalpari)  | Tolerant to water-logging and good ratooner       | North Central Zone                          |
| Co 0233(Kosi)  | Moderately resistant to red rot and smut          | North Central Zone                          |
| CoC 01061  | Moderately resistant to red rot.                  | East Cost Zone                              |

|   |   |   |
|---|---|---|
| CoLk 94184 (Birendra)   | Tolerant to drought and waterlogging with good rationing                                | North Central Zone  |
| Co 0118   | High sucrose content and resistant to red rot, wilt and smut, tolerant to water logging | Punjab, Haryana, Rajasthan, Central and Western Uttar Pradesh and Uttarakhand |
| Co 0239, Co 0238, Co 06927, Co 0403, Co 86032   | Tolerant to drought   | Southern and central zone   |
| <b>Jute</b>   |   |   |
| JRO 204 (Suren), JBO-2003-H (IRA)   | Early sowing suitability with fine fibre quality  | Tossa jute belt   |
| JRC-532 (Sashi)   | Very fine fibre fineness white jute   | White jute belt   |
| JRC 80 (Mitali)   | Premature flowering resistance  | White jute belt   |
| JBO 1 (Sudhangsu)   | Drought tolerance   | Tossa jute belt of West Bengal, Assam, Bihar & Orissa                         |
| S19, Tarun, JRO 7835, JRO 524, JRO 878, JRC 321, JRC 7447, JRC 532, JRC 517, Bidhan Pat - 1 | Suitable for water logging condition.   | Jute growing belts  |

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