GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE AND FARMERS WELFARE DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA UNSTARRED QUESTION NO. 2529

TO BE ANSWERED ON 3rd August, 2021

AGRICULTURAL ORNITHOLOGY

2529. SHRIMATI SUPRIYA SULE: DR. AMOL RAMSING KOLHE: DR. SUBHASH RAMRAO BHAMRE: SHRI KULDEEP RAI SHARMA: SHRI RATANSINH MAGANSINH RATHOD: SHRI SUNIL DATTATRAY TATKARE: DR. DNV SENTHILKUMAR. S.: SHRI MANICKAM TAGORE B.:

Will the Minister of Agriculture and Farmers Welfare कृषि एवं किसान कल्याण मंत्री be pleased to state:

(a) whether the Government has formulated any specific programme/project for the development of Agricultural Ornithology aimed at controlling insects and pests affecting agricultural crops, if so, the details thereof;

(b) the details regarding the breeding of insectivorous birds in the country;

(c) the details of funds allocated for the implementation of such projects during the last three years and the current year, State-wise;

(d) whether the State Governments of Maharashtra, Tamil Nadu, Gujarat and Karnataka have submitted any specific proposal in this regard; and

(e) if so, the details thereof and the reaction of the Government thereto?

ANSWER

MINISTER OF AGRICULTURE & FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI NARENDRA SINGH TOMAR)

(a) Government initiated a research on agricultural ornithology in 1982 aimed at gathering information on extent of damage by depredatory birds on different crops and evolving suitable management strategies to minimize crop losses and increase the productivity / production. On the other hand, there are birds, which are destroyers of insect pest and rodents, and hence, are considered as beneficial to the crop and the farmers. Such beneficial birds are highlighted and conserved for sustenance of avian biodiversity in agricultural landscape. During 2014 the project

title was renamed as All India Network Project (AINP) on Vertebrate Pest Management.

Since the inception of the AINP on Agricultural Ornithology it has not only created awareness among the scientists and farming community on the role of birds in relation to crop production / protection in the country but also helped intensification of research on the subject. It has also helped to bring innovations in bird pest management, training, demonstration and undertaking proven technologies in the field through adoptive programmes for bird pest management.

(b) Details regarding breeding of insectivorous birds of agricultural importance in India are attached at Annexure.

(c) The details of funds allocated for the implementation of such projects are as follows:

| Centre Name | Year wise expenditure ICAR Share excluding salaries (Rs. in Lakhs) | | | | |
|--|---|-----------|-----------|-----------|--|
| | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 | |
| Central Arid Zone Research Institute (CAZRI), Jodhpur, Rajasthan | 43.95 | 28.25 | 28.30 | 20.00 | |
| Professor Jayashankar Telangana State Agricultural University (PJTSAU), Telangana | 37.29 | 21.11 | 28.34 | 22.00 | |
| Anand Agricultural University, Gujarat | 26.00 | 14.42 | 7.20 | 16.00 | |
| Punjab Agricultural University, Punjab | 43.00 | 31.00 | 29.41 | 30.00 | |
| Kerala Agricultural University, Kerala | 26.00 | 21.47 | 20.00 | 20.00 | |
| Assam Agricultural University, Assam | 56.00 | 50.00 | 20.00 | 10.00 | |
| University of Agricultural Sciences (UAS), Bangalore, Karnataka | 22.00 | 24.20 | 25.50 | 21.00 | |
| Acharya N.G. Ranga Agricultural University (ANGRAU), Andhra Pradesh | 27.00 | 23.45 | 19.75 | 20.00 | |

(d) and (e) No such project has been submitted by the State Governments of Maharashtra, Tamil Nadu, Gujarat and Karnataka. The states of Gujarat and Karnataka are directly partners in the ICAR Project.

As referred to in reply to part (b) of Lok Sabha Unstarred Question No. 2529 for reply on 3.8.2021

Breeding details of insectivorous birds of agricultural importance in India

| S.N | Common Name | Scientific Name | Habitat | Breeding period in India | Clutch Size* |
|-----|-----------------------|--------------------------------|--|--|-----------------|
| 1 | Indian Pond Heron | Ardeola grayii | Marshes, flooded paddy- fields, village tanks, ditches, borrow pits, lakes, mangrove creeks and tidal mudflats | Round the Year | 3 - 6 |
| 2 | Cattle Egret | Bubulcus ibis | Damp grassland, paddy-fields, grass banks of village tanks, canals and lakes and forest clearings | Round the Year | 3 - 4 |
| 3 | Intermediate egret | Ardea intermedia | Rivers, lakes, jheels, cultivation, marshes, estuaries, mangroves and coral reefs | November- May and July- September, Varying locally | 2 - 5 |
| 4 | Little Egret | Egretta garzetta | Lakes, marshes, rivers, paddy fields | November- September, varying locally | 3 - 5 |
| 5 | Black- headed ibis | Threskiornis melanocephalus | Wetlands, reed beds, cultivation. | June-March, varying according to monsoon and water conditions | 3 - 4 |
| 6 | Red-naped ibis | Pseudibis papillosa | River banks, cultivation, woodland areas. | March- October in North India; later further south | 3 - 4 |

| 7 | Glossy Ibis | Plegadis falcinellus | Wetlands, cultivation | May-July | 3 - 4 |
|----|----------------------------------|--------------------------|---|--|--------|
| 8 | Blackwinged Kite | Elanus caeruleus | Cultivation, grassland, scattered bushes. | Round the Year | 3 or 4 |
| 9 | Black kite | Milvus migrans | Urban areas, cultivation, grasslands | September- May, varying locally | 2 or 4 |
| 10 | Rednecked falcon | Falco chicquera | Cultivation, savannah and open country side. | January-May | 2 - 4 |
| 11 | Lessor kestrel | Falco naumanni | Grassland, shrub land, marshland, cultivation | Migrant | 3 - 6 |
| 12 | Common kestrel | Falco tinnunculus | - | January- June | 3 - 7 |
| 13 | Red-wattled Lapwing | Vanellus indicus | Wetlands, dry lake beds, cultivation, open country. | March- September, varying locally | 3 - 4 |
| 14 | Yellow- wattled Lapwing | Vanellus malabaricus | Wetlands, cultivation, open country. | March- August, varying locally | 4 |
| 15 | Whiskered Tern | Chlidonias hybrid | Reservoirs, wetlands, rice fields | Mid May- August | 2 or 3 |
| 16 | Gull-billed Tern | Gelochelidon nilotica | Reservoirs, wetlands, rice fields | End April- end June | 2 or 3 |
| 17 | Barn Owl | Tyto javanica | Grassland, cultivation, woodland, open country. | Round the Year, Varying locally | 4 - 7 |
| 18 | Spotted Owlet | Athene brama | Cultivation, woodland, open country, urban areas | November- April, Varying locally | 3 or 4 |
| 19 | White- breasted Kingfisher | Halcyon smyrnensis | Cultivation, wetlands, open country | January- August, varying locally | 4 - 7 |
| 20 | Green bee- eater | Merops orientalis | Wetlands, scrublands, cultivation, urban settlements. | February to May | 4 - 7 |
| 21 | Chestnut- headed Bee- | Merops Ieschenaulti | Cultivation, open country, | February to June | 5 - 6 |

| | eater | | wetlands. | | |
|----|----------------------------|--------------------------|--|--|--------|
| 22 | Blue-tailed Bea-eater | Merops philippinus | - | April - May | 5 - 7 |
| 23 | Indian Roller | Coracias benghalensis | Cultivation, open country, near forest. | March to June | 4 or 5 |
| 24 | Eurasian hoopoe | Upupa epops | Near cultivation, open country, grassland, near forest | January to August | 5 or 6 |
| 25 | Barn Swallow | Hirundo rustica | Cultivation, wetlands, urban areas | March-July | 4 or 5 |
| 26 | Red-rumped swallow | Cecropis daurica | Cultivation, urban areas, wetlands | March- September, varying locally | 3 or 4 |
| 27 | Wire-tailed Swallow | Hirundo smithii | Cultivation, wetlands, urban areas, cliff edges | March- September, varying locally | 3 - 5 |
| 28 | Collard Pratincole | Glareola pratincola | Cultivation, open country, wetlands | Breeds in Pakistan, winter visitor to India | 2 or 3 |
| 29 | Small Indian Pranticole | Glareola lactea | Cultivation, open country, wetlands | February- June | 2 or 3 |
| 30 | Great Grey Shrike | Lanius excubitor | Scrub lands, open areas, rocky outcrops and cultivation | Migrant | 3 - 6 |
| 31 | Bay-backed Shrike | Lanius vittatus | Open country, cultivation, near wetlands, shrub land | February- September | 3 - 6 |
| 32 | Long- tailed shrike | Lanius schach | Open country, cultivation, near wetlands, shrub land | December- July | 3 - 6 |
| 33 | Brown Shrike | Lanius cristatus | Cultivation, shrub land, wetlands | Migrant | 2 - 6 |
| 34 | Black Drongo | Dicrurus macrocercus | Savanna, cultivation, and urban habitats | March - August, April - June | 3 - 5 |
| 35 | White-bellied drongo | Dicrurus caerulescens | Dry scrub, cultivation, forests. | March - June | 2 - 4 |

| 36 | Ashy woodswallow | Artamus fuscus | Cultivated areas, forest clearings and often in areas with tall palm trees | March - July | 2 - 3 |
|----|----------------------------------|-------------------------------|---|--|--------|
| 37 | Common Woodshrike | Tephrodornis pondicerianus | Forest, woodland, near cultivation. | January - September, April - May | 3 |
| 38 | Black- headed Cuckooshrike | Lalage melanoptera | Forest, woodland, near cultivation | June - September, April-May | 3 - 6 |
| 39 | Black-winged Cuckooshrike | Lalage melaschistos | Forest, woodland, near cultivation. | April to July | 2 |
| 40 | Small Minivet | Pericrocotus cinnamomeus | Forest, shrub land, cultivation. | February - November | 3 |
| 41 | Common lora | Aegithina tiphia | Forest, shrub land, near cultivation. | January to September | 2 - 4 |
| 42 | Blue-throated Flycatcher | Cyornis rubeculoides | Open areas, fields, fallow land, and scrub jungle. | March to July | 4 |
| 43 | White- throated Fantail | Rhipidura albicollis | Forest, scrub and cultivation | March to August | 3 |
| 44 | White- browed Fantail | Rhipidura aureola | Forest, woodland and cultivation | February to August | 3 or 4 |
| 45 | Zitting Cisticola | Cisticola juncidis | Cultivation, grassland and near wetlands | May- September | 3 - 5 |
| 46 | Grey - breasted Prinia | Prinia hodgsonii | Open woodland, scrub jungle, bushes and hedgerows amidst cultivation | March- October | 3 or 4 |
| 47 | Rufous- fronted Prinia | Prinia buchanani | Grasslands, cultivation | June- September | 4 or 5 |
| 48 | Thick-billed Warbler | Arundinax aedon | Dense grasses, forest edge, and shrubbery near cultivation. | Migrant | 5 - 6 |
| 49 | Clamorous Reed Warbler | Acrocephalus stentoreus | Reeds, wetland vegetation, near cultivation. | Migrant | 3 - 6 |
| 50 | Paddyfield Warbler | Acrocephalus Agricola | Rice fields, long grasses | Migrant | 4 - 5 |

| | | | near wetlands, | | |
|----|---------------------------------|----------------------------|--|---|--------|
| 51 | Blyth's Reed- Warbler | Acrocephalus dumentorum | Cultivation hedges, forest edges, tall reeds near wetlands | Migrant | 4 - 6 |
| 52 | Eastern Orphean Warbler | Curruca crassirostris | Scrubland, woodland, near cultivation | Migrant | 4 - 6 |
| 53 | Lesser White Throat | Curruca curruca | Scrubland, forest edges, woodland, near cultivation | Migrant | 3 - 7 |
| 54 | Indian Robin | Copsychus fulicatus | Cultivation, scrub forest, Forest fringes | December | 2 or 3 |
| 55 | Oriental maghpie- robin | Copsychus saularis | Forested areas, near cultivation. | February- September | 4 or 5 |
| 56 | Black Redstart | Phoenicurus ochruros | Cultivation, villages, Scrub and forest fringes. | May -early August | 4 - 6 |
| 57 | Pied Bushchat | Saxicola caprata | Cultivation, villages, Scrub and forest fringes | February- August | 3 - 5 |
| 58 | Paddyfield Pipit | Anthus rufulus | Open country, fallow cultivation | November- September, varying locally | 3 or 4 |
| 59 | Twany Pipit | Anthus campestris | Open country, grasslands, fallow cultivation. | Migrant | 4 - 6 |
| 60 | Richard's Pipit | Anthus richardi | Fallow cultivation, open country, grasslands. | Migrant | 4 - 6 |
| 61 | Ashy crowned sparrow lark | Eremopterix griseus | Scrub forest, cultivated and fallow lands | Around the year | 2 or 3 |
| 62 | Rufous-tailed Lark | Ammomanes phoenicura | Open areas, fields, fallow land, and scrub jungle | February- May | 2 - 4 |
| 63 | Indian Bush Lark | Mirafra erythroptera | Near cultivation, open country, scrub. | June- September | 2 - 4 |

| 64 | Greater Short-toed | Calandrella brachydactyla | Cultivated fallow fields, | Migrant | 2 - 3 |
|----|------------------------------------|------------------------------|--|---|--------|
| | Lark | | grassland, rocky outcrops, near water | | |
| 65 | Sykes's lark | Galerida deva | Rocky fields, fallow fields. | March- September | 2 - 3 |
| 66 | Creasted Lark | Galerida cristata | Dry open country and cultivation. | March- August | 2 - 3 |
| 67 | Brahminy starling | Sturnia pagodarum | Dry forest, scrub jungle and cultivation | February- September | 3 or 4 |
| 68 | Rosy starling | Pastor roseus | Cultivation, grasslands, urban areas, wetlands | Migrant | 3 or 4 |
| 69 | Common starling | Sturnus vulgaris | Urban areas, cultivation, grasslands. | March-June | 5 or 6 |
| 70 | Asian pied myna | Gracupica contra | Cultivation, hedgegrows, human settlements. | March- October | 4 or 5 |
| 71 | Common Myna | Acridotheres tristis | Cultivation, woodlands, human settlements. | February- September | 4 or 5 |
| 72 | Bank Myna | Acridotheres ginginianus | Cultivation, villages, towns | March- August | 3 - 5 |
| 73 | House Crow | Corvus splendens | Cultivation, villages, towns | April-June | 4 or 5 |
| 74 | Jungle Crow | Corvus macrorhynchos | Cultivation, near forests, woodlands. | March-May | 4 or 5 |
| 75 | Pied Cuckoo | Clamator jacobinus | Near cultivation, woodland, human habitation | June to August, January to March | 2 |
| 76 | Greater Coucal | Centropus sinensis | Open forest, near cultivation, scrub, human habitation. | All the year | 3 or 4 |
| 77 | Square-tailed drongo- cuckoo | Surniculus Iugubris | Forest edges, near cultivation | March to October | 3 or 4 |
| 78 | Common- hawk Cuckoo | Hierococcyx varius | Forests, gardens, near cultivation. | March - July | 3 or 4 |
| 79 | Indian Cuckoo | Cuculus micropterus | Forests, woodland, near | May to July | 1 |

| | | | cultivation | | |
|----|-----------------------------|------------------------------|--|---------------------------|--------|
| 80 | Red-vented Bulbul | Pycnonotus cafer | Forests, human habitation, cultivation | June- September | 2 or 3 |
| 81 | Yellow-eyed Babbler | Chrysomma sinense | Scrub, near cultivation. | June-August | 4 or 5 |
| 82 | Yellow billed Babbler | Argya affinis | Forests, scrub, cultivation, gardens. | Around the year | 2 - 4 |
| 83 | Common Babbler | Argya caudata | Scrub, forests, cultivation areas. | Around the year | 3 or 4 |
| 84 | Large Grey Babbler | Argya malcolmi | Scrub, cultivation areas, forests. | May- September | 3 or 4 |
| 85 | Jungle Babbler | Argya striata | Forests, scrub, cultivation, plantations. | Around the year | 3 or 4 |
| 86 | Plain Prinia | Prinia inornata | Scrub, forests, cultivation. | Around the year | 3 - 5 |
| 87 | Ashy Prinia | Prinia socialis | Scrub, forests, cultivation, human habitations. | Around the year | 3 or 4 |
| 88 | Common tailorbird | Orthotomus sutorius | Scrub, forests, cultivation, human habitations. | Around the year | 3 or 4 |
| 89 | Cinereous Tit | Parus cinereus | Woodland, cultivation | February- May | 4 - 6 |
| 90 | Yellow Wagtail | Motacilla flava | Wetlands, cultivation, river banks, mudflats, grasslands | Migrant | 4 - 8 |
| 91 | Citrine wagtail | Motacilla citreola | Wetlands, cultivation, river banks, mudflats | Migrant | 3 - 5 |
| 92 | Grey Wagtail | Motacilla cinerea | Wetlands, cultivation, forest streams | Migrant | 4 - 6 |
| 93 | White Wagtail | Motacilla alba | Wetlands, cultivation, flooded fields, grassland | Migrant | 4 - 6 |
| 94 | White- browed Wagtail | Motacilla maderaspatensis | Wetlands, cultivation, human habitations | March- October | 3 - 5 |
| 95 | House Sparrow | Passer domesticus | Human habitations, | Mid January- Mid April | 3 - 5 |

| | | | cultivation | | |
|-----|---------------------------------|-----------------------------|---|---------------------|--------|
| 96 | Baya Weaver | Ploceus philippinus | Cultivation, wetlands | June- September | 2 or 4 |
| 97 | Black- rumped flameback | Dinopium benghalense | Woodlands, forest fringes, near cultivation | February- July | 3 |
| 98 | Grey francolin | Ortygornis pondicerianus | Cultivation, forests, scrub, grasslands. | April- September | 6 - 8 |
| 99 | Dusky crag- martin | Ptyonoprogne concolor | Hillsides, urban areas, near cultivation | Around the year | 2 - 4 |
| 100 | Golden- fronted leaf bird | Chloropsis aurifrons | Forests, near cultivation | February- August | 2 - 3 |

* Means number of eggs laid in a single brood.
