

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

RAJYA SABHA
UNSTARRED QUESTION NO-500
TO BE ANSWERED ON- 26/07/2024

ADOPTION OF SMART FARMING METHODS

500. SHRI C. Ve. SHANMUGAM:

Will the Minister of THE AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether Government is promoting smart farming methods through the use of technology and innovation in the agriculture sector;
- (b) if so, the details thereof;
- (c) the details of funds sanctioned, allocated and utilized so far across the country including Tamil Nadu;
- (d) the details of the achievements made so far across the country as a result thereof;
- (e) whether Government has set any target in this regard;
- (f) if so, the details thereof?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

(SHRI SHIVRAJ SINGH CHOUHAN)

(a) to (f): The Government of India supports and facilitates the State Governments for infusing modern and smart farming technologies into the agriculture sector. The use of modern machines including kisan drones is promoted under Sub-Mission on Agricultural Mechanization (SMAM). Under National e-Governance Plan in Agriculture (NeGPA) program, funding is given to State Governments for Digital Agriculture Projects using emerging technologies like Artificial Intelligence, and Machine Learning (AI/ML), Internet of Things (IOT), Blockchain etc. A component called “Innovation and Agri-Entrepreneurship Development” has been launched under Rashtriya Krishi Vikas Yojana (RKVY-RAFTAAR) in 2018-19 with the objective of promoting innovation and Agri-Entrepreneurship by providing financial support and nurturing the incubation ecosystem. Under this programme, start-ups are encouraged to use innovative technologies to resolve challenges faced in agriculture and allied sectors. The funds are released to the States based on their proposals. The details of State-wise funds released under SMAM and achievements including Tamil Nadu so far are given in Annexure-I, details of projects sanctioned under NeGPA during Financial Year 2020-21 to 2023-24 are given in Annexure-II and State-wise allocation, release and utilization under RKVY are given in Annexure-III.

Year-wise funds released and physical progress under SMAM (2014-15 to 2024-25 as on 22.07.2024):
State-wise Release of Funds and Physical Progress under SMAM (2014-15 to 2024-25):-as on 22.07.2024

State	Funds Released (Rs. in Crores)	No. of Demos	Trainees Trained	Machines distributed under subsidy	CHCs established	Hi-tech Hubs Established	Farm Machinery Banks Established
Andhra	808.72	600	1950	251514	7108	62	3428
Arunachal	56.97	1700	2710	39729	7	0	6
Assam	73.17	0	0	1034	8	0	585
Bihar	117.67	0	0	30660	903	2	842
Chhattisgarh	302.31	750	0	100556	2475	0	273
Gujarat	79.45	400	1174	27481	185	19	30
Haryana	266.54	5000	185	24870	1139	65	1109
Himachal	162.24	200	150	42885	14	0	39
J&K	72.54	5630	0	19069	202	0	155
Jharkhand	29.32	0	1250	0	0	0	527
Karnataka	973.86	225	75	292454	129	216	445
Kerala	263.62	504	56	105756	89	0	1546
MP	433.73	10500	310	253889	1576	22	100
Maharashtra	574.18	1250	0	97387	1160	30	192
Manipur	113.14	4752	0	20283	211	0	609
Meghalaya	14.24	200	0	2457	0	0	8
Mizoram	40.62	0	0	5596	0	0	314
Nagaland	218.34	592	586	20894	25	0	511
Odisha	322.24	200	300	58010	1603	12	158
Punjab	102.68	13800	0	12666	250	6	1000
Rajasthan	126.13	200	1250	32425	670	10	1174
Sikkim	44.72	640	233	6223	0	0	52
Tamil Nadu	680.92	0	0	74244	1690	114	2216
Telangana	40.67	1800	900	28954	49	0	146
Tripura	176.9	0	0	50881	0	0	727
UP	656.56	400	1251	176722	5263	25	5481
Uttarakhand	313.18	840	1773	37418	345	0	1846
W.Bengal	83.04	5000	1565	7768	437	11	49
D&D Nagar Haveli	1.1			89	0	0	0
Puducherry	10			621	13	0	0
Ladhakh	1.03			1314	0	0	0
Total	7159.83			1823849	25551	594	23568

Annexure -II

Projects sanctioned under NeGPA from FY 2020-21 to 2023-24

S No	State/UT	Year	Project Name	Project Cost (Rs. in Cr.)	*Amount released (Rs. in Cr.)
1	Tripura	2022-23	Centralized farmer database, Direct benefit transfer, Precision farming, Integrated Information Ecosystem, Use of AI/ ML and Block chain technologies, Capacity Building of Employees, Digital Soil Health Card App, SSO Integrated Platform, Farmer Producer Organization (FPO) Portal etc.	8.4	1.89
2	Punjab	2020-21	Development of Crop and Soil Digital Algorithms for Crop Growth Monitoring, Crop Yield and Soil Quality and Precision irrigation in major cropping systems	2.96	0.51
		2021-22	Estimation of Ground water draft and water budgeting	2.49	0.51
		2023-24	Implementation of National e-Governance Plan in Punjab	8.07	1.80
3	Uttar Pradesh	2020-21	(i)Unmanned Aerial Vehicle for Agriculture Applications, (ii) Hand Held Tool based Soil Health Monitoring Integrated system and (iii) Automated Fire Alert System for Crop Residue Burning in U.P.	2.01	1.20
		2023-24	Digital Crop Survey	129.31	27.19
4	Assam	2020-21	e-project on ML based Crop Health Checkup for paddy crops.	1.49	1.34
		2023-24	Pilot on Digital Crop Survey	1.43	1.17
5	Puducherry	2022-23	Project proposal for setup of Intelligent Agriculture Advisory System(i-AAS), Robotic Control Tissue culture (RCTC) and real time irrigation management system(RIMS)	2.25	0.40
6	Nagaland	2021-22	Soil & Water Resource Management, Meteorological Analysis & Forecasting System using Remote Sensing, GIS mapping, Drone and Emerging Technologies under NeGPA	10.97	8.53

7	Bihar	2020-21	Digital Package of Practices for Major Crops and Automation Technique in Irrigation In State Seed Multiplication Farms	5.89	3.53
		2023-24	Pilot of Digital Crop Survey	2.26	0.78
8	Himachal Pradesh	2022-23	Project proposal for setup of ICT Infrastructure Requirements in the Department of Agriculture	13.20	2.97
9	Meghalaya	2020-21	Development of web and mobile based "Crop Pest Surveillance and Advisory Project (CROPSAP)	0.69	0.62
		2021-22	Regarding creation of farmers database	40.81	0.14
10	Odisha	2020-21	Creation of Farmer Database	2.97	1.78
		2021-22	Phase II of Krushak database	2.75	1.03
		2023-24	Digital Crop Survey	2.82	0.84
11	Sikkim	2021-22	Sikkim Agriculture Resource and Management System (ARMS)	2.78	1.56
		2023-24	Precision farming in Sikkim	6.98	3.14
12	Telangana	2020-21	(i)Crop Monitoring (ii)Automated irrigation Systems (iii)Fertilizer Calculation (iv)Automated Farm Operation (v)Traceability from	3.10	1.86
		2023-24	Digital Crop Survey	0.75	0.45
13	Arunachal Pradesh	2020-21	Resilient Supply Chain for identified Agricultural Crops Leveraging Digitization	0.90	0.81
		2021-22	1.Developing a resilient Agriculture /Farm Produce Supply Chain System Leveraging Digitalization in Arunachal Pradesh 2. Development of Smart Pest Surveillance System cum Geo Spatial aided Agricultural Information System	3.00	0.67
		2023-24	Creation of Farmer Database & Supporting Farmers through Real Time Geospatial Analytics in increasing Farm productivity in Agriculture by Machine Learning Technique	19.83	4.46

14	Andhra Pradesh	2020-21	Unified Digital Programme (UDP) for Agriculture	7.08	4.25
		2021-22	Implementation of Phase-II “Unified Digital Platform app to operate Rythu Bhrosa Kendralu (RBKs)”	44.46	11.66
15	Madhya Pradesh	2020-21	(i)Precision Farming and (ii)Ground water Availability	4.71	2.37
		2023-24	1.To operate and Maintain ‘e-Krishi Yantra Anudan Portal’ (Online Subsidy Disbursement System in E-Rupi Mode)	4.43	0
			2. Digital Crop Survey	5.52	1.65
16	Tamil Nadu	2021-22	creation of Unified Farmers Database and building layers or solutions over the Farmers Database	4.28	1.60
		2023-24	1.Geo-referencing of 8026 villages and Development of Farmers’ database	4.70	1.41
			2.Digital Crop Survey	50.76	15.22
17	Mizoram	2021-22	Geospatial Analytics & Decision Support for agriculture Development in Mizoram	15.13	0.63
18	Gujarat	2023-24	1.Revamping of existing iKhedut Portal 2. Digital Crop Survey	11.84	2.34
19	West Bengal	2023-24	Development of Digital Ecosystem for Crop Mapping, Crop surveillance, Crop Yield & Production Estimation in west Bengal	12.14	0.56
20	Kerala	2023-24	Digital Crop Survey	3.03	0.45

*= Rest amount will be released after submission of Utilization Certificates (UCs) by the concerned states.

Annexure-III

State-wise allocation and release of RKVY during 2020-21 to 2023-24 as on 22.07.2024

Sl. No	Name of the State/UT	2021-22		2022-23		2023-24	
		Allocation	Release	Allocation #	Release	Allocation #	Release
1	Andhra Pradesh	203.47	97.19	183.20	45.80	86.33	86.33
2	Arunachal Pradesh	14.74	6.27	18.66	9.34	12.54	58.16
3	Assam	159.95	150.69	226.86	113.44	98.18	236.85
4	Bihar	140.95	69.77	131.80	0.00	77.68	48.42
5	Chhatisgarh	91.03	43.27	80.84	40.42	41.63	41.63
6	Goa	17.94	0.00	17.80	4.45	8.89	0.95
7	Gujarat	145.84	69.39	130.32	65.16	74.94	59.21
8	Haryana	83.89	64.23	57.69	28.84	34.48	28.86
9	Himachal Pradesh	23.54	11.68	22.37	0.00	14.61	3.66
10	Jammu & Kashmir	10.58	0.00	Now UTs			
11	Jharkhand	60.02	0.00	50.57	0.00	35.96	7.39
12	Karnataka	218.84	113.08	206.09	51.53	82.89	129.52
13	Kerala	63.11	50.44	55.74	27.88	30.69	14.24
14	Madhya Pradesh	197.46	96.62	180.50	45.12	99.79	66.97
15	Maharashtra	249.23	120.55	229.77	57.45	129.48	94.73
16	Manipur	23.25	17.47	31.57	7.90	16.26	29.06
17	Meghalaya	23.70	10.79	31.90	0.00	23.03	19.96
18	Mizoram	33.65	16.11	49.37	12.35	12.70	26.77
19	Nagaland	17.14	26.95	22.64	11.32	19.49	82.49
20	Orissa	107.26	49.58	90.06	19.61	55.91	46.76
21	Punjab	151.29	75.36	85.22	0.00	36.80	25.63
22	Rajasthan	179.64	87.80	166.37	83.18	93.57	30.00
23	Sikkim	9.40	4.14	14.20	3.55	6.78	66.78
24	Tamil Nadu	197.96	171.50	182.32	136.74	77.75	139.55

25	Telangana	207.64	0.00	186.00	0.00	61.07	0.00
26	Tripura	52.31	52.27	74.28	37.14	27.14	61.26
27	Uttar Pradesh	302.71	145.10	255.27	134.07	137.07	191.63
28	Uttarakhand	54.15	30.94	52.83	26.40	36.08	25.01
29	West Bengal	188.01	92.75	170.85	170.85	82.98	165.71
	Total States	3228.71	1673.94	3005.08	1132.54	1514.71	1787.52
29	A & N Islands	2.61	1.30	2.60	0.00	3.33	1.00
30	Chandigarh	0.13		0.10	0.00	0.67	0.00
31	D& N Haveli	0.10		0.10	0.00	4.44	0.00
32	Daman & Diu	0.11		0.10	0.00	0.67	0.00
33	Delhi	0.23		0.10	0.00	0.67	0.00
34	Jammu & Kashmir			9.90	2.25	5.21	4.32
35	Lakshadweep	0.10		0.10	0.00	0.44	0.00
36	Pudducherry	4.04	0.00	4.00	0.43	0.13	0.03
37	Ladakh	9.00		9.00	0.00	4.44	1.11
	Total UTs	16.32	1.30	26.00	2.68	20.00	6.46
	Grand Total	3245.02	1675.24	3031.08	1135.22	1534.71	1793.98
