GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY

RAJYA SABHA UNSTARRED QUESTION No. 2200

ANSWERED ON 07/08/2025

INITIATIVES FOR PROMOTING TRADITIONAL KNOWLEDGE, RURAL TECHNIQUES AND LOCAL INNOVATIONS IN BIHAR

2200 # DR. BHIM SINGH:

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Government has taken any concrete and effective initiatives for the identification and promotion of traditional knowledge, rural technologies and local innovations in Bihar;
- (b) whether it is a fact that the process of patenting rural innovations in Bihar and providing technical support by NIF or other institutions has been limited and sluggish; and
- (c) if not, the districts in Bihar whom innovations have been identified with the number of districts out of these which have received patents, financial assistance or commercial support during the last five years and the details thereof?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR THE MINISTRY OF SCIENCE AND TECHNOLOGY & EARTH SCIENCES (DR. JITENDRA SINGH)

(a) Yes, Sir. The Government of India is actively working towards identification and promotion of traditional knowledge, rural technologies, and local innovations across the country, including Bihar.

The Science and Heritage Research Initiative (SHRI) Cell of the Department of Science and Technology (DST) aims to utilize modern Science & Technology (S&T) tools to preserve, protect, and present the traditional knowledge of India. The SHRI Cell supported a project at Indian Institute of Technology (IIT) Patna, Bihar for digital restoration of UNESCO World Heritage site Nalanda by creating Augmented Reality (AR) to revive its ancient glory.

The Science for Equity, Empowerment and Development (SEED) Division of DST through its variety of schemes/programmes constantly endeavours societal development by supporting rural technologies and local innovations for creating sustainable livelihoods, primarily for enabling disadvantaged sections of the society. Project support was given to Bihar Agriculture University, Bhagalpur for revitalizing chickpea cultivation through microbial consortium in iron-deficient farmlands of Bihar and to ICAR Research Complex for Eastern Region, Patna to work on sustainable livelihood improvement of Scheduled Caste (SC) community through introduction of high yielding cereals, pulses and vegetable crops in Meskaur and Sirdala Blocks, Nawada District, Bihar.

In addition to above mentioned projects, during last 3 years DST supported 60 projects in multiple domains of S&T in Bihar.

(b) to (c): No, Sir. The National Innovation Foundation (NIF), an autonomous institution of the Department of Science and Technology (DST), Government of India, is actively involved in identifying and promoting traditional knowledge, rural techniques, and local innovations across the country, including Bihar. During last five years, NIF had scouted a total of 6850 ideas, innovations, and traditional knowledge from 32 districts of Bihar and also facilitated technology commercialization and supported innovations in the field of Engineering, Plant Varieties / Crop Protection, and traditional knowledge. Three grassroots innovations from Bihar were awarded at national and international platforms. The list of 36 granted patents, 3 patent applications, and 1 PPV&FRA (Protection of Plant Varieties and Farmers' Rights Authority) filed from Bihar may be seen at Annexure I. List of innovations financially assisted by NIF from 8 districts of Bihar may be seen at Annexure II.

Annexure I

S.No.	Patents Granted	District
1.	Herbal Composition for Prevention or Control of Plant Pests	East Champaran
	(Patent # 418984)	
2.	Herbal Composition For Prevention or Control of Plant	East Champaran
	Pests (Patent # 352692)	
3.	Herbal Composition For Prevention or Control of Plant	East Champaran
4	Pests (Patent # 352692) Harbel Composition For Prevention or Control of Plant	Fact Champage
4.	Herbal Composition For Prevention or Control of Plant Pests (Patent # 415583)	East Champaran
5.	Improved Hacksaw (Patent Number: 386458)	Sitamarhi
J.	Improved Flucksus (Futent Futencer: 500 150)	Situituiii
6.	Smoke Free Cooker Assembly (Patent # 378369)	East Champaran
7.	A Multifocal Lighting Device (Patent # 387281)	Lakhisaria
8.	Two Way Operating Gear System (Patent # 388215)	Khagaria
0.	1 wo way Operating Ocal System (Fatcher # 300213)	Knagaria
9.	Multipurpose Walking Support Device (Patent # 403211)	Patna
10.	A Noise Reduction Device (Patent # 412044)	West Champaran
		2.5
11.	A Modified Cart (Patent # 417013)	Muzaffarpur
12.	An Emergency Mechanism For Vehicular Escape (Patent #	Patna
12.	442201)	1 ama
13.	A Water Irrigation Pump (Patent # 515591)	West Champaran
	7	
14.	Novel Garment For Antimolestation (Patent # 514992)	Samastipur
15.	Sleep-Walking Detector and Preventer (Patent # 567390)	Madhubani
16.	Automatic Food Making Machine (Patent # 391068)	Bhagalpur
10.	rationalic 1 ood waking wachine (1 atent # 351006)	Dhagaipui
17.	Automatic Food Making Machine (Patent # 425469)	Bhagalpur
18.	Automatic Food Making Machine (Patent # 448948)	Bhagalpur
19.	Herbal Composition For Therapeutic Management of Obesity	Sitamarhi
	and Process of Preparation Thereof (Patent No. 526091)	~
20.	A Herbal Formulation For Treating Diseases of The Mouth	Nalanda
	and To Maintain Oral Hygiene (Patent Number 439627)	
21.	Herbal compositions for management of liver disorders and	Sheohar
	methods thereof (Patent Number: 434341)	
22.	Herbal Pharmaceutical Formulation For Cataract and Process	Sitamarhi
	of Preparation Thereof (Patent Number- 432456)	

S.No.	Patents Granted	District			
23.	Herbal formulation for Prevention and Treatment of Eye disease and method of preparation Thereof (Patent No. 419848)	Nawada			
24.	Herbal preparation for Therapeutic management of Neurological disorders (Patent No. 416170)	Nawada			
25.	Herbal Composition For Control of High Blood Pressure and Process of Preparation (Patent Number :391323)	West Champaran			
26.	Herbal Composition For Treatment Of Diarrhoea and Method Thereof (Patent Number :385679) Nawada				
27.	Herbal Composition For A Beverage With Antihypertensive Properties (Patent Number :381691)	West Champaran			
28.	A Herbal Formulation For Treating Disease and Nawada Complications Caused By The Malarial Parasite (Patent Number :380902)				
29.	Herbal Compositions For Treatment or Prevention of Nawa Neurological Disorders (Patent Number :371369)				
30.	Herbal Compositions For Management of Liver Disorders and Methods Thereof (Patent Number :366860)				
31.	A Herbal Composition For Treatment of Malaria (Patent Number :365970)	Siwan			
32.	Herbal Composition For A Beverage With Anti-Inflammatory Properties (Patent Number :363070)	East Champaran			
33.	Herbal Preparation For Therapeutic Management Of Neurological Disorders (Patent Number :356907)	Sheohar			
34.	A Herbal Formulation To Enhance Poultry Immunity (Patent Number :394718)	East Champaran			
35.	A Herbal Formulation For Treatment Of Bloating (Patent Number :378824)	West Champaran			
36.	Herbal Composition For The Treatment Of Ephemeral Fever (Patent Number :362274)	Nawada			
S. No.	Patents Filed	District			
1.	Iron Cutting and Bending Machine (Application no. 202231024659)	Nawada			
2.	A cannula safety apparatus/glove and method thereof (Application no. 202521020192)	Bhagalpur			
3.	Synergistic herbal pesticide composition for controlling agricultural insect pests and methods of preparation thereof (Application: 202521017731)	East Champaran			
4.	A PPV&FRA application for registration was filed - SONALI- 45: Improved cauliflower variety: Application Number: REG/2025/0742	Vaishali			

Annexure II

S.No.	District	Innovations
1.	Vaishali	 i. Sanjeev Selection: Improved cauliflower variety ii. Sonali 45: Improved cauliflower variety iii. Agaat Kritika: Improved cauliflower variety iv. KS 67: Improved variety of onion
2.	Sitamarhi	i. China 72: Improved variety of chilliii. Maniyari: Improved variety of hyacinthbean
3.	East Champaran	 i. Sagar Jamal: Improved variety of potato ii. Ankit: Improved cauliflower variety iii. Katka 112: Improved cauliflower variety iv. Asni Matar: Improved variety of garden pea v. Raja Mooli: Improved variety of radish vi. Herbal preparation for controlling lepidopteran and sucking pests of Brinjal crop
4.	Samastipur	RK 2001: Improved variety of brinjal
5.	West Champaran	Herbal botanical compositions for controlling of sucking and lepidopteran insect pests of Brinjal and Tomato
6.	Jamui	Fridge Surahi
7.	Nawada	Metal Cutting cum Bending Machine
8.	Nalanda	Power tiller-mounted potato harvester
