

**RURAL DEVELOPMENT
SCHEMES IN THE INDIAN
HIMALAYAN REGION:
PROSPECTS AND
CHALLENGES**

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Abstract

Rural development in the Indian Himalayan region (IHR) has always been a challenge due to inherent constraints of inhospitable terrain, remoteness, fragility of ecosystem, and economic poverty of people thereby adding complexity in making policies and strategies for development planning. This paper presents a synthesis of 46 major Central Sector Schemes/ Programmes of Govt. of India pertaining to livelihood and rural development, environmental protection and farmers' welfare those are implemented in the 12 IHR States through various Departments / Agencies. The State Governments also have over three dozen schemes/ programmes and projects for various sectors of rural development and farmers' welfare encompassing even the recent sectors such as climate change, disaster management, organic farming, biodiversity conservation, solar and bio-energy, protected cultivation, etc. with special emphasis on women participation, weaker sections and BPL families. However, there is still a need to value women's role in policy making processes enabling convergence of Central and State Govt. schemes in development. Also, the potential of S&T needs to be optimally utilized to overcome the development constraints along with understanding the operational, political and bureaucratic infrastructure and provisioning of appropriate

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institutional and delivery mechanisms to enhance rural income. To address economic poverty of people of the Himalaya, appropriate policies need to be brought out to restore balance between economic interest and ecological imperatives and realize the goal of sustainable development in the ecologically fragile IHR.

Keywords

Rural development, Natural resource management, Central and State Sector Schemes, Indian Himalayan villages

Introduction

In India people live mostly in the villages; thus rural development is synonymous with the development of the people living in rural areas. Village development encompasses infrastructure creation, sustainable livelihoods, and decentralized governance. It is concerned with putting more efforts and investments for raising efficiency per person. Therefore, education, information, training, research, and application of research are within the scope of rural development. Mountains, with their inherent constraints of remoteness, sensitive ecosystem, and marginality, pose unique challenges to rural development (Jodha et al. 1992). In this context setting up village cluster- level support to strengthen governance, transforming regular programmes by adopting a saturation approach has been suggested (Tambe et al. 2012). There is a need to further expand capacities and economic opportunities in rural areas by prioritizing self-employment sector, by expanding non-farm rural economy, youth training and placement, strengthening democratic institutions to ensure rapid and inclusive growth of the rural economy that would reduce poverty and improve the quality of life of the rural poor. Globally, mountains are regarded as distinct development areas and present specific challenges for formulation of policies, strategies and planning processes for sustainable development (Action Plan for Himalaya, 1992). Existing sectoral policies for natural resource management in the mountains are found to be less- functional and unsuitable. Gulati & Gupta (2003) in the Himalayan state H.P. pointed out that the existing policies hardly address the key issues of sustainable mountain development and even there are

inter and intra policy conflicts. Through integrated resource management the critical linkages between mountain highlands and lowlands can be addressed to achieve sustainable development (Singh, 2006).

Rural development - The Himalayan context

The fragile mountain ecosystems are globally recognized as water towers, sources of hydro-power, repository of rich biological diversity, centres of culture and indigenous knowledge, tourist destinations, indicators of climate change and providers of ecosystem goods and services (G- SHE, 2017). The ecologically fragile Indian Himalayan Region (IHR) spread across 10 States fully; Assam and West Bengal partially, and two Union Territories J&K and Ladakh, and characterized by diverse demographic, economic, environmental, social and political systems. According to 2011 census, about 79 percent population (of the total 51 million population) of the IHR is rural. It has been realized that despite the importance of mountains in sustainable development context, the specific challenges of development in mountains are inadequately reflected in National Policies (Mountain Agenda, 2002). The sectoral development models applicable for plains are implemented also in the mountains. Consequently, development activities in Himalayas lack coherence causing degradation of environment, poor biological productivity, deforestation, soil erosion, landslides, flood and other natural hazards, socio-economic disparity, poverty and malnutrition, out-migration, loss of bio- diversity and cultural heritage, erosion of indigenous knowledge systems and depletion of life support systems making the region and its people more vulnerable to climate change impacts thus requires specific mountain focus in policies and programmes to address these issues of ecological and economic marginalization (Swaminathan, 1991; Anonymous, 1992). The Ministry of Rural Development, GoI also emphasizes on (a) investing in regenerating natural resources, (b) mobilizing and developing the capacities of community institutions for sustainable utilization of natural resources, and (c) aggregating 'small initiatives' to improve natural capital for integrated rural development in Himalayan mountains. To address the sustainable

development issues of IHR, various Task Forces / Working Groups / Committees were constituted from time to time by Government of India (Sharma et al. 2015). Prominent among them were: (i) National Commission on Development of Backward Classes (1981); (ii) Task Force for the Study of Eco-development in the Himalayan Region (1982); (iii) Working Group on Hill Area Development Programme (1985); (iv) Expert Group on National Policy on Integrated Development of Himalaya (1993); (v) High Level Commission on Transforming the North-eastern Region (1997); (vi) Task Force on the Mountain Ecosystems (2006); (vii) Task Force to look into problems of hill states and hill areas (2010); (viii) Working Group on improvement and development of transport infrastructure in the north-east (2012); and (ix) Committee to study development in hill states focusing on infrastructure, livelihood and human development (2013). Recently in 2017, NITI Aayog constituted Five Working Groups for Sustainable Development of IHR: (1) Inventory and Revival of Springs for Water Security, (2) Sustainable Tourism, (3) Shifting Cultivation, (4) Strengthening Skill & Entrepreneurship, and (5) Data/Information for Informed Decision Making. On the basis of the Thematic Reports/ Recommendations of these Working Groups, NITI Aayog constituted 'Himalayan State Regional Council' for Sustainable Development in IHR that will also monitor the implementation of action points for Central Ministries, institutions and across the Himalayan States. In the IHR context it is noticeable that during various Five Year Plans (FYPs) desired targets or goals were still to met fully. Learning (based on the monitoring indicators of FYPs) such as: (i) A realization of consideration of the peculiarities of hilly terrain and hill societies in policy formulation / planning process; (ii) An appreciation of values of hills in the maintenance of ecological balance having long-term economic values; (iii) Preference to development programmes relying more on indigenous/local resources; (iv) Emphasis on the area specific development programmes compatible to ecological and social specificities; (v) Need for hastening the process of technology transfer; (vi) Importance of long-term studies for ecological and economic changes; and (vii) Relevance of natural resource management programme

implementation in ecological units instead of administrative units (Sharma et al. 2015). Protection of interests of indigenous population, therefore, must assume the focus as well as priority for interventions aimed for sustainable development in the IHR. Government Policies & Programmes on Mountain Development: Government of India is committed to raising the living standards of its citizens and ensuring inclusive growth for all – “Sabka Saath Sabka Vikas Sabka Vishwas” as a guiding principle that consists of five considerations: Indian economy has high rate of growth but major development challenges; pockets of under-development need rapid improvement; inclusive growth; sustaining 8 percent or higher GDP growth; and meet SDG commitments. To enable optimum utilization of their potential, ‘Transformation of Aspirational Districts’ programme has been started by Government of India with a focus on Health & Nutrition, Education, Agriculture & Water Resources, Financial Inclusion & Skill Development, and Basic Infrastructure, thereby effectively transform these districts based on 49 key performance indicators. The broad contours of the programme are Convergence (of Central & State Schemes), Collaboration (of Central, State level ‘Prabhari’ Officers & District Collectors), and competition among districts driven by a mass movement. With States as the main drivers, this program focuses on the strength of each district, identify low-hanging fruits for immediate improvement, measure progress, and rank districts. Central Government Schemes (CSS) are broadly divided into two categories, i.e. Central Sector Schemes and Centrally Sponsored Schemes. Major CSS running in India and in the IHR states focusing on rural development, farmers’ welfare and natural resources management with salient features compiled from various sources are given in Table 1. Most of these schemes running in the IHR States target almost every sector of rural development and livelihood support, viz., agriculture/horticulture (15 nos.), livelihood/employment generation/ capacity building (15), forestry/biodiversity/medicinal plants (8), livestock and fisheries (4), water (2) and clean technology (1). In these schemes special emphasis has been placed on rural upliftment, women participation and capacity building, weaker sections and BPL families. Information about the CSS pertaining to its objectives,

beneficiary target groups and funding pattern and other details can be obtained from National Institute of Rural Development & Panchayati Raj in each State under MoRD and "Sansad Adarsh Gram Yojana". Other than the CSS, the State Governments have over 100 schemes/programmes and projects for various sectors of rural development and farmers welfare and many of them are state-specific and encompass recent subjects such as climate change, disaster management, organic farming, biodiversity conservation, solar and bio-energy, polyhouses and protected cultivation, medicinal and aromatic plants, mushroom, etc. other than the erstwhile routine subjects such as agriculture, horticulture, animal husbandry etc. (Table 2).

Table 1:
Central Sector Schemes/Programmes / Projects of livelihood enhancement, rural development, natural resource management and farmers welfare in IHR

S. No.	Name of the scheme / Brief description / Ministry / Deptt.	J & K	HP	Uttarakhand	Sikkim	Nagaland	Tripura	AP	Meghalaya	Manipur	Mizoram	Assam Hills	WB Hills
1.	National Livelihood Mission- Ajeevika (Ministry of Rural Development).	X	X	X	X	X	X	X	X	X	X	X	-
2.	Biodiversity Conservation and Rural Livelihood Improvement Project- (MoEF&CC)	X	X	X	X	X	X	X	X	X	X	X	-
3.	Integrated Scheme on Agricultural Co-operation (Department of Agriculture, Co-operation and Farmer's Welfare)	X	X	X	X	X	X	X	X	X	X	X	-
4.	Clean Technology & Waste Minimisation - (MoEF&CC)	X	X	X	X	X	X	X	X	X	X	X	-

5.	Dairy Entrepreneurship Development Scheme- (Department of Animal Husbandry, Dairying and Fisheries)	X	X	X	X	X	X	X	X	X	X	X	-
6.	Deen Dayal Upadhyaya Grameen Kaushalya Yojana- (MoRD)	X	X	X	X	X	X	X	X	X	X	X	X
7.	Environmental Education Training Scheme - (MoEF&CC)	X	X	X	X	X	X	X	X	-	X	X	-
8.	MSME Cluster Development Programme- Infrastructure Development & Capacity Building - (Ministry of Small & Medium Enterprises)	X	X	X	X	X	X	X	X	X	X	X	
9.	Intensification of Forest Management- (MoEF&CC)	X	X	X	X	X	X	X	X	X	X	X	X
10	Integrated Scheme on Agricultural Marketing- (Ministry of Agriculture and Cooperation)	x	X	X	X	X	X	X	X	X	X	X	X
11	Joint Forest Management- (MoEF&CC)	X	X	X	X	X	X	X	X	X	X	X	X
12	Mahatma Gandhi National Rural employment Guarantee Act (2005); MGNREGA - (MoRD)	X	X	X	X	X	X	X	X	X	X	X	X
14	Marketing Assistance of NTFP and MFP Products- 'Van Dhan Vikas Karyakram' (Ministry of Tribal Affairs)	X	X	X	X	X	X	X	X	X	X	X	-

15	National Small Industries Corporation Ltd. Marketing Assistance Scheme - <i>(Ministry of Micro, Small & Medium Enterprises)</i>	X	X	X	X	X	X	X	X	X	X	X	-
16	Minor Forest Produce (MFP) marketing through MSP and Development of Value Chain for MFP- <i>(Ministry of Tribal Affairs)</i>	X	X	X	X	X	X	X	X	X	X	X	-
16	Mission for Integrated Development of Horticulture- <i>(Ministry of Agriculture and Cooperation)</i>	X	X	X	X	X	X	X	X	X	X	X	X
17	Multi-Sectoral Development Programme- <i>(Ministry of Minority Affairs)</i>	X	X	X	X	X	X	X	X	X	X	X	
18	National Livestock Mission - <i>(Department of Animal Husbandry, Dairying and Fisheries)</i>	X	X	X	X	X	X	X	X	X	X	X	-
19	Dairy Development Programme- <i>(Department of Animal Husbandry, Dairying and Fisheries)</i>	X	X	X	X	X	X	X	X	X	X	X	-
20	National Food Security Mission- <i>(Ministry of Agriculture and Cooperation)</i>	X	X	X	X	X	X	X	X	X	X	X	X
21	National Mission on Sustainable Agriculture - <i>(Ministry of Agriculture and</i>	X	X	X	X	X	X	X	X	X	X	X	X

	<i>Farmers Welfare)(a) Paramparagat Krishi Vikas Yojana; (b) Management of Soil Health and Soil Health Card Schemes; (c) Rainfed Area Development; (d) Per Drop More Crop- Pradhan Mantri Krishi Sinchayi Yojana; (e) Sub-Mission on Agroforestry</i>												
22	National Mission on Agricultural Extension and Technology - <i>(Ministry of Agriculture and Cooperation)</i>	X	X	X	X	X	X	X	X	X	X	X	X
23	National Fisheries Development Board- <i>(Department of Animal Husbandry, Dairying and Fisheries)</i>	X	X	X	X	X	X	X	X	X	X	X	X
24	National AYUSH Mission- <i>(Ministry of AYUSH)</i>	X	X	X	X	X	X	X	X	X	X	X	X
25	National Medicinal Plants Board- <i>(Ministry of AYUSH)</i>	X	X	X	X	X	X	X	X	X	X	X	X
26	National Water Mission - <i>(Ministry of Water Resources)</i>	X	X	X	X	X	X	X	-	X	X	-	
27	National Mission on Oilseeds & Oil Palm- <i>(Ministry of Agriculture and Cooperation)</i>	X	X	X	X	X	X	X	X	X	X	X	X
28	National Mission on Himalayan Studies (NMHS)- Central Sector- Grant-in-Aid Scheme <i>(Mountain</i>	X	X	X	X	X	X	X	X	X	X	X	X

	<i>Division, MoEF&CC)</i>												
29	National Service Scheme- (<i>Ministry of Youth Affairs & Sports</i>)	X	X	X	X	X	X	X	X	X	X	X	X
30	National e-Governance Plan in Agriculture (<i>Deptt. of Agriculture, Cooperation & Farmers' Welfare</i>)	X	X	X	X	X	X	X	X	X	X	X	X
31	Organic Farming in North East Region- (<i>Ministry of Development of NE Region</i>)	X	X	X	X	X	X	X	X	X	X	X	-
32	Pradhan Mantri Fasal Bima Yojana/Weather Based Crop Insurance Scheme (<i>Department of Agriculture, Cooperation & Farmers' Welfare</i>)	X	X	X	X	X	X	X	X	X	X	X	X
33	Paramparagat Krishi Vikas Yojana- (<i>Ministry of Agriculture and Cooperation</i>)	X	X	X	X	X	X	X	X	X	X	X	X
34	Pradhan Mantri Krishi Sinchai Yojana- (<i>Ministry of Agriculture and Cooperation & Ministry of Water Resources</i>)	X	X	X	X	X	X	X	X	X	X	X	X
35	Prime Minister's Employment Generation Programme- (<i>Ministry of Micro, Small & Medium Enterprises</i>)	X	X	X	X	X	X	X	X	X	X	X	X
36	Trade Related Entrepreneurship Assistance for Women- (<i>Ministry of Micro, Small & Medium Enterprises</i>)	X	X	X	X	X	X	X	X	X	X	X	-

37	Protection of Plant Varieties and Farmers' Rights Authority, India <i>(Ministry of Agriculture & Farmers Welfare)</i>	X	X	X	X	X	X	X	X	X	X	X	X
38	Rashtriya Krishi Vikas Yojana- <i>(Ministry of Agriculture and Cooperation)</i>	X	X	X	X	X	X	X	X	X	X	X	X
39	Sub Mission on Seed and Planting Material <i>(Department of Agriculture, Cooperation & Farmers' Welfare)</i>	X	X	X	X	X	X	X	X	X	X	X	X
40	Sub-Mission on Plant Protection and Plant Quarantine <i>(Directorate of Plant Protection, Quarantine and Storage)</i>	X	X	X	X	X	X	X	X	X	X	X	-
41	Sub-Mission on Agricultural Mechanization <i>(District Agriculture Officer of Concerned State Governments)</i>	X	X	X	X	X	X	X	X	X	X	X	-
42	S&T Programme for Socio-Economic Development- <i>(Ministry of Science & Technology)</i>	X	X	X	X	X	X	X	X	X	X	X	-
43	Nai Roshni-Scheme for Leadership Development of Minority Women- <i>(Ministry of Minority Affairs)</i>	X	X	X	X	X	X	X	-	X	X	X	X
44	Special Central Assistance to Scheduled Castes <i>(Ministry of Social Justice & Empowerment)</i>	X	X	X	X	X	X	X	-	X	X	X	-
45	Support to	X	X	X	X	X	X	X	X	X	X	X	X

.	Training & Employment- (Ministry of Women & Child Development)												
46	Capacity Building and Technical Assistance of North Eastern Region Youth - (Ministry of Development of NE Region)	-	-	-	-	X	X	X	X	X	X	X	-
47	Upgrading the Skills and Training in Traditional Arts/Crafts for Development (USTTAD)- (Ministry of Minority Affairs)	X	X	X	X	X	X	X	X	X	X	X	-
48	Village Entrepreneurship Start-up Programme- (MoRD)	X	X	X	X	X	X	X	X	X	X	X	-

Table 2:
State Government schemes/programmes/projects on rural development and farmers' welfare in the IHR states.

Name of Scheme / Department	Focus area/activities
Arunachal Pradesh	
Horticulture Garden Scheme (Horticulture Department)	Diversified agriculture and allied livelihoods, livestock and horticulture.
Living Heritage (Village Tourism including eco-tourism) (Tourism Department)	Local artists, artisans, traditional art and establish Culture Village and Tourism Haat.
Development of Rural Tourism (Tourism Department)	Construction of eco-friendly tourist huts.
Assam	
Mukhya Mantri Matsya Bikash Achoni (Fisheries Department)	Construct pond for fishery to promote diversified agriculture, livestock and horticulture.
Mukhyamantri Karma Jyoti Achoni (Industries Department)	Modern tools/ machineries & yarn given to artisans / trained personnel and grants to SHGs for self-employment.
Kalpataru Scheme (Industries Department)	Financial support for employment generation in Agriculture to BPL people.
Mukhya Mantri Mohila Samridhi Achoni (Handloom and Textile Department)	Training/capacity building of Producer Group/Women SHGs/Producers to adopt modern weaving techniques.

Craftsman Training Schemes (Labour and Employment Department)	Training to artisans on craftsmanship.
Mukhyamantri Axom Nirmal Aru Seuj Abhiyan (Panchayat & Rural Devp. Department)	(i) Providing toilets in each household and public institutions; and (ii) solid and liquid waste management.
Jammu & Kashmir	
Development of Horticulture in Dry Lands & Hilly Areas (Agriculture Department)	Promote diversified agriculture, livestock and horticulture in dry lands and hilly areas.
Development of Rare & Minor Fruits Including Berries (Agriculture Department)	Subsidy given for introducing rare and minor fruits.
Subsidy on Plant Protection Machinery (Agriculture Production Department)	50 percent subsidy is provided for plant protection machinery for spraying insecticides/ pesticides.
Development of Demonstration Plots (Agriculture Production Department)	Full support for demonstration of model plots for one year (saplings, fencing, agricultural inputs, etc).
Mini Sheep Farm Scheme (Animal & Sheep Husbandry Department)	Credit linked Mini Sheep Farms (50 Ewes and 2 Rams) for unemployed youth.
Development of Apiculture (Agriculture Production Department)	50 percent subsidy given for a bee colony.
Development of Mushroom Scheme (Agriculture Production Department)	Good quality seeds, compost, trainings and exposure visits for mushroom cultivation.
Handicrafts Training (Handlooms Training Industries & Commerce Department)	Training artisans, preferably women, in Kashmiri handicraft and weaving through handlooms.
State/District Plan (PHE, Irrigation & Flood Control Department)	Watershed management (traditional water bodies, irrigation, drainages, flood protection, etc).
Silvi Pastures and Fodder Development (Forest Department)	Develop forest degraded land into pasture.
Rehabilitation of Degraded Forests (Forest Department)	Plantation in degraded forests.
Village Wood Lot (Forest Department)	Trees are planted in community land.
Himachal Pradesh	
Kisan Bagwaan Samridhi Yojana (Agriculture Department)	Cash crops/precision farming (Polyhouses) through micro-irrigation etc.
Scheme for Soil Testing (Agriculture Department)	Free soil testing and Soil Health Cards to farmers.
Crop Diversification Project (Agriculture Department)	Facilities of irrigation, farm access roads, marketing, post-harvest, organic farming etc.
Horticulture Development Project (Horticulture Department)	50 percent subsidy to SC/ST/BPLs for planting of orchards; for small farmers (25 percent subsidy) and marginal farmers (33.3 percent subsidy).
Plants Protection Programme (Horticulture Department)	Provide fungicide, insecticides and equipment on 50 percent subsidy for small and marginal farmers and 30

	percent subsidy for big farmers.
Training Programme for SCs/STs/OBCs for self employment (Rural Development Department)	Assistance for tools /sewing machines to trained people (BPL family) for Rs. 1500/-.
Skill Development Allowance (Labour and Employment Department)	Upgrade skill of physically handicapped unemployed youth for 24 months.
Self-Employment to Women (Women & Child Development Department)	Grant provided for self-employment to women with income <Rs. 35000/yr.
Village Tourism including eco-tourism (Tourism Department)	Home Stay Scheme in rural and offbeat areas.
Maharishi Valmiki Sampooran Swachhata Puruskar (Rural Development Department)	A competition based State level award of ₹ 10.00 lakh; Rs. 5 lakh at Division level, at District level Rs. 3 lakh and at Block level Rs. 1 lakh to cleanest Gram Panchayat.
Bio-gas (Rural Development Department)	Construction of Bio-gas units in villages.
Mukhya Mantri Adarsh Gram Yojana (Social Justice and Empowerment Department)	Integrated development (road, water, sanitation and street lights, etc.). of selected villages with > 40 percent SC/ST population.
Manipur	
North Eastern Council Fund for Resource Mobilisation Scheme (Agriculture, Horticulture, Veterinary and Animal Husbandry Department)	Employment and income generating programmes for improving socio-economic conditions of OBCs & minorities.
Promotion of Fisheries Activities through competition on fish fair cum fish crop (Fisheries Department)	Awards to motivate fish farmers and farmers with highest records of production.
State share to NEC programme for Horticulture Development Activities (Agriculture, Horticulture, Veterinary and Animal Husbandry Department)	Grants for revival of orchard, amelioration of acid soil of horticulture crops and production of quality and nucleus potato seeds.
Economic Development Programme (Commerce and Industries Department)	Enhancing skill of individual/ family by training on crafts, embroidery, carpentry, tailoring, etc.,
National Afforestation Scheme, National Service Scheme (Forests & Environment Department)	Tree plantation in homestead, schools and public institutions through NSS.
Biodiversity Conservation Programme (Forests and Environment & DST)	Plantation in river basin and reserve forest, protection and cleanliness of State Rivers.
State Medicinal Plants (Department of Forests & Env.)	Plantation / conservation of medicinal plants.
Mission on Climate Change and Adaptation (Directorate of Environment)	Project implementation at community, national and trans-boundary level vulnerable to climate change.

Disaster Management (Directorate of Disaster Management Authority)	Funds institutes/ universities for publications/ training & capacity building/ assistance to disaster victims etc.
Renewable Energy for Rural Applications (Renewable Energy Development Agency)	Promotes family biogas plants, improved cook stoves and solar cookers.
Meghalaya	
Intensive Arts and Culture Development Programme (Arts and Culture Department)	Promote indigenous folk and tribal arts in music, dance and drama.
Agriculture Academic Studies (Agriculture Department)	Financial assistance to B.Sc. (Agri/Horti) students selected on merit on reservation seats in Universities.
State Rice Mission (Agriculture Department)	Increase productivity of rice using modern science and extension of technologies.
Tea Development (Horticulture Department)	Plantation of tea at experimental/commercial scale by free seedling distribution/subsidy.
Tuber Crops Development - Potato, Tapioca, Colocasia (Horticulture Department)	Enhance potato production by distribution of HYV seeds, chemicals and equipments on 50 percent subsidy.
Vegetable Development Scheme (Horticulture Department)	Providing high yielding/ hybrid crop seeds; garden tools at 50 percent subsidy. 100 percent assistance for organic cultivation and trellis.
Organic Manure (Agriculture Department)	Encourage farmers for use of eco-friendly, non-toxic humus and organic fertilisers viz., Azotobacter, Azospirillum, Rhizobium, etc.
Plant Protection Including IPM (Agriculture Department)	Subsidy (50 percent) on plant protection equipments. Free distribution of IPM equipments for trapping pests.
Floriculture Development Scheme (Horticulture Department)	Subsidy for floriculture and planting materials and other inputs.
Grants in Aid (Commerce & Industries Department)	Grant to pass out trainees to set up their own unit by providing basic tools, equipments and working capital.
Plantation Development (Arecanut, Cashewnut, Coconut) (Horticulture Department)	Subsidy (33-50 percent) provided to farmers for planting materials, polypipes and water tank.
Fruit Development (Temperate or Citrus Fruits) (Horticulture Department)	Improved fruit planting materials, garden tools, implements at 50 percent subsidy.
Organic Manures Including Vermicompost and Compost Pit (Horticulture Department)	Subsidy to farmers to adopt vermiculture, vermicompost and organic manure.
Seed Farms (Agriculture Department)	Production of high quality crop seeds, horticultural seedlings for distribution to cultivators.
Scheme for Self-Help Group/ Cooperative Society (Animal	Financial assistance for livestock equipments and feed to registered SHGs

Husbandry and Veterinary Department)	/ cooperative societies.
Rural Cluster Approach for Poultry and Piggery Devp. (Animal Husbandry and Veterinary Department)	Assistance to farmers for poultry and piggery.
Educated Unemployed Youth Scheme (Animal Husbandry and Veterinary Department)	Financial assistance for cattle, goat, poultry, feed and equipments to educated unemployed youth.
General Scheme (Animal Husbandry and Veterinary Department)	Financial assistance for livestock (cattle, goat, poultry, feed /equipments) or poultry to agricultural labourer/small and marginal farmers.
Pine Needles Briquetting Project (Meghalaya State Rural Livelihoods Society)	Pine needles (bought at Rs. 2/kg) are balled for converting it into fuel briquettes.
Meghalaya State Aquaculture Mission (Fisheries Department)	This mission includes 6 mini missions- Viz., productivity, infrastructure development, indigenous and endemic species conservation, fisheries, capacity building, media campaigns and documentation.
IBDLP- Apiculture Mission (Meghalaya Basin Development Authority)	Upscale apiculture as an organised industrial enterprise.
Master Craftsman (Commerce & Industries Department)	Stipend to village youth for training on master crafts, handloom and handicraft.
Placement Linked Skill Training Programme (Meghalaya State Skill Development Society)	Skilling of youth in self-security, hospitality, sewing, welding, automobile, electrician, etc.
Chief Minister's Rural Development Fund (Community & Rural Development Department)	Creation of wage employment on socially and economically useful public assets.
Meghalaya Tourism Development and Investment Promotion Scheme (Meghalaya Tourism Department)	Incentives (30 percent) of project cost for home stays/ resorts.
Clean and Green Award (State Rural Employment Society, Community & Rural Development Department)	Raising environmental standards, health and quality of life of rural communities.
State Plan Scheme by Social Forestry Division (Forestry Department)	Forestry, Environment & Ecology, Afforestation of Critically degraded Catchment Areas.
IBDLP-Natural Resource Management (Meghalaya Basin Development Authority)	Harnessing of natural resources for sustainable livelihood through nurseries, seed bank, water management.
Soil & Water Conservation Schemes in General Areas (Soil & Water Conservation)	Reduce soil erosion, land degradation, water conservation, afforestation, cash/ horticulture crops, etc.
Mizoram	
Support for Extension, Innovation &	Promote better farming practices and

Awareness Through Research Organisation & Training (Horticulture Department/ NEC)	livelihood support.
Pilot Project for Development of Horticulture & Floriculture Crops (Horticulture Department/ NEC)	Promoting diversified agriculture, livestock and horticulture.
Diversification of Agronomical Crops (Agriculture Department/ NEC)	Promote better farming practices and livelihood support.
Nagaland	
Nagaland Bee and Honey Mission (Department of Agriculture)	Focuses on (i) Research; (ii) Apiculture Development; and (iii) Industry and Marketing.
Nagaland Handloom and Handicraft Development Corporation Ltd. (Industry and Commerce Department)	Organising exhibition, Festival Fairs, Craft Bazaar, Handloom Expo for artisans and weavers to promote products and marketing skills.
Grant-in-Aid to Village Development Boards (Rural Development Department)	Develop infrastructure and income generation activities for women and youth.
Nagaland Bamboo Development Agency (Agriculture Department)	Promotion of bamboo based industries for local traditional bamboo craft & design and value addition for generating income.
Sikkim	
Total Literacy Mission (Human Resource Dev.)	Special training module for computer literacy.
Sikkim Organic Mission (Food Security & Agriculture Development)	Organic farming support for creation of composting /vermi-composting units; Integrated nutrient management / Bio-fertiliser/ EM technology; Integrated pest management; soil testing laboratory and Organic certification.
Tripura	
Tripura Bamboo Mission (Industries & Commerce Department)	Livelihoods enhancement of rural poor through Bamboo value addition.
Tripura Rural Livelihood Mission (Department of Rural Development)	Development of Producer Organisations or Clusters.
Mission for Integrated Development of Horticulture (Department of Agriculture)	Promoting diversified agricultural and allied livelihoods, including livestock and horticulture.
USTTAD (Upgrading the Skills and Training in Traditional Arts/Crafts for Development) (Welfare of Minorities Department)	Conserve traditional arts/crafts and building capacity of traditional artisans and craftsmen.
Tripura Rural Livelihood Mission (Rural Development Department)	Formation of SHGs for promotion of Micro-Enterprise.
Livelihoods of Women Through SHGs (Ministry of DoNER)	Federating women SHG and Producers Group.
Accelerated Irrigation Benefit & Flood Management Programme (Department of Agriculture)	Supports major, medium and minor irrigation projects, flood management and restoration of water bodies.
Clean Technology & Waste Minimisation Strategies (Department	Industrial pollution abatement through clean technology and preventive

of Forests)	strategies.
Uttarakhand	
Indira Mahila Samekit Vikas Yojana (Women Empowerment and Child Development)	Assistance is provided for: (i) Drudgery reduction; (ii) Empowerment of women; (iii) Job employment skills; (iv) Women specific infrastructure and technologies; (v) Legal literacy and awareness; Women rights; (vi) Health and education of girls and women; (vii) Women entrepreneurship; (viii) Support to women SHGs.
Bee Keeping (Sericulture Department)	Support for bee keeping, collection and processing of honey, etc.
Garden Rejuvenation Scheme (Horticulture Department)	Support for rejuvenating of orchards and plantations.
Scheme of Fruit Plants Plantation (Horticulture Department)	Supports fruit plantations and nursery raising.
Mukhya Mantri Sanrchohit Udyan Vikash Yojana (Horticulture Department)	Promotes diversified agriculture, livestock and horticulture, polyhouses to create nursery.
Horticulture Insurance Scheme (Horticulture Department)	Supports insurance coverage of failure of notified crop due to natural calamities, pests & diseases.
Spice Mega Park Scheme (Horticulture Department)	Mega parks are constructed to boost production and quality of spices.
Medicinal and Aromatic (MAP) Development (Uttarakhand State Medicinal Plant Board)	Support in the form of 50 percent subsidy to the growers for mass cultivation of 26 MAP species.
CM Jadi Buti Yojana (Herbal and Aromatic Plants)	Financial assistance for cultivation of medicinal plants.
Distribution of Water Pump, Sprinkler Set, etc. (Agriculture Department)	Subsidy for procurement of farm machineries, etc.
Seed Production Programme / Core Village Scheme (Agriculture Department)	Supports production and cultivation of selective seeds.
Establishment of Poly House / Mechanisation (Agriculture Department)	Subsidy is provided for poly house for raising horticulture seedlings, floriculture, etc.
Construction of Agri. Input Stores (Agriculture Department)	Supports entrepreneurs for setting up farm machinery store, seed, fertilizer, etc.
Post-Harvest Management (Horticulture Department)	Technical assistance for post harvest management of food grains.
Scheme of Power Machine (Tractor /Power Tiller) (Horticulture Department)	Farm machineries to farmers / farmers group.
Uttarakhand Decentralized Watershed Development Project – Gramya Yojana (Directorate of Watershed Management)	Focuses on: (i) watershed and natural resource management; (ii) increasing productivity on arable lands; (iii) agribusiness development and alternative livelihoods.
Integrated Livelihood Support Project (Directorate of Watershed	Watershed management for food security and livelihood enhancement.

Management)	
Construction/ Renovation of Canals (Irrigation & Flood Control Department)	Construction of canals/ water channels for irrigation.
Drought Prone Area Programme (Rural Development Department)	Minimise the negative effects of drought on production of crops and livestock.
Integrated Wasteland Development Projects (Rural Development Department)	Wasteland development by afforestation and plantation of timber wood, bamboo, etc.
Plantation in Reserve & Civil Soyam Forest (Forestry & Wildlife Department)	Plantation for regeneration of forest.
Plantation of Bamboo Species, Biofuel Species (Forestry & Wildlife Department)	Bamboo plantation in the fallow and waste land.
Catchment Area Conservation and Management Plan (Water Supply & Sanitation Department)	(i) Rejuvenation of natural water sources; (ii) Rain water harvesting; (iii) Plantation of broad leaf species.
Bio-Energy (Non-Conventional Energy Department)	Biogas Plants with capacity ranging 2- 4 Cum are installed.
Solar Energy (Non-Conventional Energy Department)	(1) Solar Photovoltaic (i) Solar lantern; (ii) LED based solar street lights/home lights; (iii) Solar power plant. (2) Solar Thermal (i) Solar water heater; (ii) Solar cooker; and (iii) Solar steam cooking systems.
Establishment of Ayush Gram (Department of Medical Health and Family welfare)	Ayush Gram establishment for cultivation of medicinal plants for traditional health care system.
Organic finger millet production Programme (Agriculture Department)	Supports construction of agriculture stores and cultivation of organic finger millets.
West Bengal(Darjeeling)	
Free Crop Insurance Scheme (Bangla Shashya Bima) (Government of West Bengal)	Government will pay full premium for selected crops (aman paddy, aus paddy, jute and maize) to farmers in 15 districts.
SHAHY (Department of Panchayats & Rural Devp.)	Targets people not covered under poverty alleviation and social security programmes.

Constraints / Limitations in Implementation of the Schemes & Recommendations:

In spite of a vast spectrum of schemes /programmes /projects on rural development and famers welfare in the IHR the desirable outcomes are always debated. Understandably, there could be various constraints specific to one scheme or the other that makes an area of further investigation. In the Himalayan mountain context it has been argued that constraints such as: easy access of institutional finance, enabling credit guidelines and also the

existing laws and policies are not women-friendly to negotiate their roles in households, communities, and market (Resurrección et al. 2019). This is because men out-migrate in large numbers leaving women to manage agriculture, marketing or public institutions. This results in undervaluation of the role of women in most policy making processes. In this context, the MGNREGA scheme has become a community-led social movement with large participation of women thereby increasing their purchase power to uplift their living standard, health care and education of their children (Tambe et al. 2012). Skill and capacity of the rural people in executing these schemes is another limitation. The 2018 Report of NITI Aayog emphasizes that skill and entrepreneurship development in the IHR needs to focus on supporting emerging priority sectors and suitably empower the Skill India Mission and ensure convergence of Central and State Government schemes/programmes (Anonymous, 2018). There is also a need to incentivize investments in skill and entrepreneurship development by public, private and development organizations, with particular focus on enhancing capacities of vulnerable groups (Anonymous, 2018). While examining the environmental implications of its schemes, the Ministry of Rural Development recommended measuring and tracking, incentives and capacity building of stakeholders. For example, it has been reported that in Uttarakhand (Rawat et al. 2010) the potential of S&T has not been adequately harnessed to overcome the development constraints emphasizing the need for establishment of technology resource centres for management of locally available bio-resources through people's participation. Singh (1987) pointed out that the implementation of poverty alleviation programmes suffer from a multitude of problems due to lack of infrastructure avoiding benefits to the poorest section up to the desired level. Murari (1988), suggests that all development programmes should be initiated after adequate understanding of the social, political and operational aspects. Another study on "Doubling of Farmer's Income by 2022" found that it is not the absence of government sponsored schemes, rather the absence of appropriate information about the schemes and institutional delivery mechanism and capacity of stakeholders behind the success of the programmes

(Negi et al. 2022). It can be concluded that there is a need to evolve new paradigm to restore balance between economic interest and ecological imperatives with due regards to socio-ecological considerations to achieve sustainable development in the ecologically fragile IHR (Singh, 2006).

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