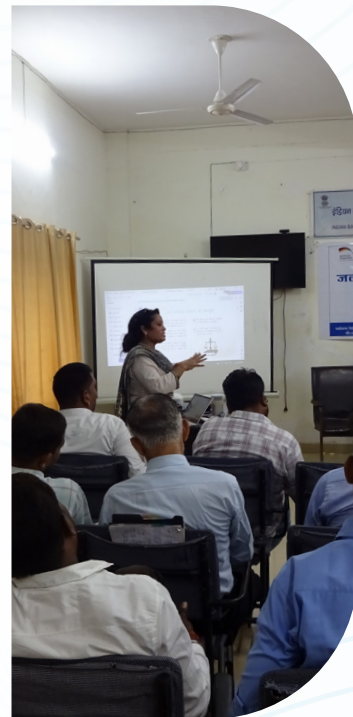


Block level Orientation Program on Mainstreaming of Climate Risk into Block Level Plans



Analytical
Report



(Half-day workshops organised in 47
Blocks of 7 Districts of Bundelkhand-
Mahoba, Chitrakoot, Hamirpur, Banda,
Jhansi, Lalitpur, Jalaun)

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Background

Globally the impacts of climate change have become a matter of serious concern and are increasingly being observed in the form of rising temperatures, longer summers, irregular rainfall, and longer gaps between one rainy season and the next. Along with this, the frequency and intensity of these events are also continuously increasing. On the one hand, these trends are affecting the sustainability of development initiatives, and on the other, they are increasing the cost of development.



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Rainfall irregularity is not only intensifying the water crisis but is also severely affecting agriculture. At the same time, a continuous rise in temperature is aggravating water stress, adversely impacting crop cycles, and unexpectedly reducing the productivity of major crops such as paddy and wheat. Due to food and water stress, human and animal health are also under threat. While the cost of farming is increasing on one side, expenditure on health protection is also rising on the other. These problems are now becoming visible at the local level, and addressing them effectively requires coordinated action by local administration, institutions, and communities.

In India, emphasis is being placed on integrating climate change adaptation efforts into National Policies and Programmes to address these challenges. In this context, comprehensive climate action plans have been developed at both national and state levels. India is committed to reducing climate risks for vulnerable groups and regions, with special focus

on ensuring financial support for the Agriculture and Water sectors. However, it is also true that the success of these action plans depends on the formulation of locally appropriate strategies and their effective implementation through coordination among all relevant stakeholders.

With financial support from the German Federal Ministry for Economic Cooperation and Development, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in close collaboration with the Ministry of Environment, Forest and Climate Change, Government of India, and the National Bank for Agriculture and Rural Development (NABARD), is implementing the Indo-German development cooperation project "Climate Adaptation, Resilience and Climate Finance in Rural India (CAFRI 2.0)". This project emphasizes effective localization through inter-sectoral coordination, stakeholder participation, and capacity building at all levels of governance.

Under this programme, GIZ is providing technical support to the Directorate of Environment, Government of Uttar Pradesh, for the implementation of the Agriculture and Water Missions under the Uttar Pradesh State Action Plan on Climate Change (UP-SAPCC) 2021–2030.

This technical assistance is specifically aimed at facilitating the implementation of selected activities under the Agriculture and Water Missions, particularly in the Bundelkhand region of Uttar Pradesh.

In this direction, a series of awareness, capacity-building, and outreach programmes are being conducted in the seven districts of the Bundelkhand region. Along with strengthening the capacities of relevant government institutions, efforts are also being made to build the capacities of climate-sensitive ecological systems. The objective is to support stakeholders in preparing and implementing risk-informed development activities in line with the goals of the Agriculture and Water Missions of the UP-SAPCC.



THE BUNDELKHAND REGION

The impact of climate change on Agriculture & allied and Water sectors in Bundelkhand has been profound, with erratic rainfall, extended droughts, depleting groundwater levels, increased soil degradation and degraded ecosystems, severely affecting crop productivity and water availability. These changes have disrupted traditional farming practices, leading to declining incomes and heightened vulnerabilities for rural communities, especially small and marginal and woman farmers, dependent on agriculture-based livelihoods.

Agriculture (and allied) and Water sectors are crucial for livelihood security and poverty eradication of the marginalized communities. Hence, climate risk informed planning and programme implementation is needed for Agriculture and Water sectors, most importantly at District, Block and Gram Panchayat levels.

MAINSTREAMING CLIMATE RISK INTO BLOCK LEVEL PLANS

Block Panchayat Development Plans (BPDP) is part of three tier system of Panchayat under Article 243 of Indian Constitution. The Block Panchayat Development Plan (BPDP) is an important framework to ensure participatory planning, efficient use of local resources, and sustainable development in rural areas. Prepared by taking into account the needs and priorities of different Gram Panchayats, the BPDP strengthens both Block and Gram Panchayats to address socio-economic requirements, education, health, employment, and basic infrastructure development. It is important that block development planning is adequately considered for integrated rural development. For desired results of developmental efforts and invested resources, the challenges of climate stress and disaster impacts also need to be addressed in block development planning. Developmental planning and implementation of programmes and schemes specifically related to water and agriculture will have to be operationalized in a manner that helps in risk reduction and resilience building.

With the objective of mainstreaming climate risks into Block Panchayat Development Plans, Gorakhpur Environmental Action Group (GEAG) undertook proactive initiatives in the Bundelkhand region. In this process, half-day workshops were organised in each block by Gorakhpur Environmental Action Group (GEAG) across all 47 development blocks of the districts of Mahoba, Jhansi, Hamirpur, Jalaun, Banda, Chitrakoot, and Lalitpur. These workshops focused on the relevance, need, and guidelines for preparing climate risk-informed and gender-sensitive Block Panchayat Development Plans.

The main objectives of the orientation workshops were:

- Introducing climate vulnerability of the district particularly related to Water and Agriculture sectors, as per SAPCC, with special emphasis on the vulnerabilities of rural women in these sectors
- Orientation on need to mainstream climate risk in developmental plans
- Introducing recommended strategic directions and actions of SAPCC
- Orientation on developing risk informed and Gender-responsive Block Panchayat Development Planning, mainly focussing on Water and Agriculture sectors

ORIENTATION WORKSHOPS IN 47 BLOCKS OF 7 DISTRICTS

The details pertaining to the orientation workshops conducted in all 47 blocks across the 7 districts of Bundelkhand is presented in the table below:

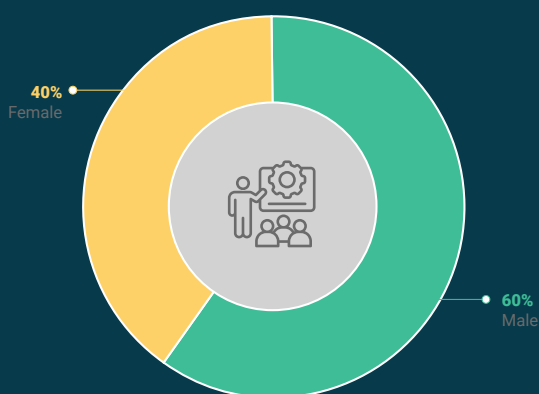
S. No.	District	Block	Workshop Date	Female	Male	Total Participants
1	Mahoba	Jaitpur	19-12-2025	2	28	30
2		Panwadi		1	21	22
3		Kabrai	20-12-2025	18	6	24
4		Charkhari		1	34	35
5	Jhansi	Babina	20-12-2025	16	11	27
6		Bada Gaon		25	19	44
7		Chirgaon	21-12-2025	18	15	33
8		Moth		16	23	39
9		Bamore	22-12-2025	11	21	32
10		Gursarai		29	11	40
11		Mauranipur	23-12-2025	18	14	32
12	Hamirpur	Bangra		20	9	29
13		Muskura	23-12-2025	14	14	28
14		Rath		5	19	24
15		Gohand	24-12-2025	9	23	32
16		Sarila		15	25	40
17		Maudha	25-12-2025	21	35	56
18		Kurara	26-12-2025	15	9	24
19	Jalaun	Sumerpur		16	24	40
20		Madhogarh	26-12-2025	7	25	32
21		Nadigaon		4	19	23
22		Konch	27-12-2025	2	23	25
23		Rampura		7	25	32
24		Kuthaund	29-12-2025	16	24	40
25		Jalaun		14	17	31
26	Banda	Mahewa	30-12-2025	21	20	41
27		Kadaura		20	14	34
28		Dakor	31-12-2025	8	23	31
29		Bisanda	28-12-2025	14	26	40
30		Baberu	29-12-2025	33	17	50
31		Naraini		6	20	26
32		Kamasin		28	13	41
33	Chitrakoot	Badokhar Khurd	30-12-2025	9	18	27
34		Mahua		7	29	36
35		Tindwari	31-12-2025	5	28	33
36		Jaspura		7	42	49
37	Chitrakoot	Pahari	06-01-2026	1	26	27
38		Karvi		3	24	27
39		Manikpur	07-01-2026	5	34	39
40		Ramnagar		3	25	28
41		Mau	08-01-2026	19	10	29

S. No.	District	Block	Workshop Date	Female	Male	Total Participants
42	Lalitpur	Bar	11-01-2026	20	19	39
43		Birdha		30	10	40
44		Talbehat	12-01-2026	15	23	38
45		Jakhaura		24	12	36
46		Mahroni	13-01-2026	24	11	35
47		Mandawra		13	20	33
TOTAL				635	958	1593

Details of Participants

- ↘ In all the orientation workshops organised at the block level, officials and staff from relevant block-level departments such as the Rural Development Department, Panchayati Raj Department, MGNREGA (now known VB-G Ram G), etc., participated. In addition, members of SHGs, village heads (Pradhans), Farmer Groups, Civil Society Organisations (CSOs), and persons associated with the Livelihood Mission at the grassroots level also took part.
- ↘ Based on the table given above, the number of women and men participants in all 47 orientation workshops can be seen as follows. In total, 1593 participants across 47 blocks in 7 districts were oriented, comprising of 60% male participants and 40% female participants.

Gender-disaggregated participation in Orientation Workshops



CLIMATE PROFILE OF THE DISTRICTS

The climate profile of the Bundelkhand region (Banda, Chitrakoot, Hamirpur, Jalaun, Jhansi, Lalitpur & Mahoba) shows a highly climate-stressed zone, marked by rising heat, shrinking rainfall, and unstable monsoon patterns. While each district exhibits distinct vulnerabilities, a common pattern emerges: increasing temperatures, weakening rainfall, and growing water insecurity impacting agriculture and livelihoods.

1. Temperature Pattern: Steady Warming and Intensifying Heat Stress

Across all districts, average maximum temperatures hover around 32.3–32.7°C and minimum temperatures around 18.5–19.1°C, but a critical threat is the consistent warming trend:

- ↘ Maximum temperatures are rising at +0.01°C/year (Lalitpur rising fastest at 0.02°C/year).
- ↘ Minimum temperatures are rising faster at +0.02°C/year in most districts (warm nights worsening).
- ↘ Declining Diurnal Temperature Range (DTR) (–0.01°C/year) across all districts indicates faster warming of nights.

Extreme Heat Exposure

Most Heat-Stressed Districts	Heat Days $\geq 45^{\circ}\text{C}$ (1980–2019)
Jhansi	163 days
Lalitpur	143 days
Mahoba	126 days
Hamirpur	126 days

Even “lower-exposure” districts like Banda (110 days) and Jalaun (103 days) face heat levels far above national rural averages.

2. Rainfall Pattern: Shrinking Monsoons, Declining Non-Monsoon Support

All districts depend heavily on monsoon rainfall (80–95%). However:

- Annual rainfall is declining everywhere (–2.4 mm to –10.52 mm/year).
- Monsoon rainfall shows the steepest declines, especially in Hamirpur (–6.14 mm/year) & Jalaun (–9.35 mm/year).
- Post-monsoon rainfall, crucial for groundwater recharge, is declining sharply in Banda, Hamirpur, Jalaun & Lalitpur.

District	Annual Rainfall Trend	Monsoon Decline
Jalaun	Very steep decline (–10.52 mm/year)	Severe weakening
Jhansi	High decline (–10.27 mm/year)	Moderate weakening
Hamirpur	High decline (–6.55 mm/year)	Sharp weakening
Banda	Moderate decline (–3.1 mm/year)	Less severe but weakening
Lalitpur & Mahoba	Higher rainfall but falling	More heavy storm bursts

Extreme Rainfall Events

- Lalitpur & Mahoba show increasing heavy rainfall days, causing surface run-off, flash floods, and poor recharge (due to rocky terrain).
- Jalaun & Jhansi have very low extreme rainfall events, meaning fewer recharge opportunities.

3. Overall Climate Vulnerability: District Patterns

District	Dominant Climate Stress
Jhansi	Extreme heat + fast rainfall decline
Lalitpur	Rapid warming + intense heavy rain (runoff)
Jalaun	Severe rainfall shortage + drying trend
Hamirpur	High heat + monsoon collapse
Mahoba	High heat stress + heavy rainfall variability
Banda	Rising minimum temperatures + post-monsoon drying
Chitrakoot	Declining monsoon + warming nights

In response to these climatic conditions, the Uttar Pradesh State Action Plan on Climate Change (UPSAPCC 2021-2030) has been formulated at the state level to address climate change impacts. The plan focuses on eight missions, and under these sectors, 41 strategies and 187 actions have been identified.



During the mining process in this block, there has been extensive felling and damage of trees.

This is one of the major reasons for the reduced rainfall in our area.

Mahendra Singh Lodhi,

Farmer and Vice President, District Kisan Yuva Morcha, Jaitpur, Mahoba



MAINSTREAMING CLIMATE RISKS INTO DEVELOPMENT PLANS: NEEDS AND APPROACHES

During this session in the workshops, participants discussed the need for risk-informed planning for sustainable development, coordination of plans, and prioritizing climate-adapted actions within existing frameworks such as the Block Panchayat Development Plan (BPDP) and Gram Panchayat Development Plan (GPDP). It was emphasized that due to climate change, the increasing frequency and intensity of climate-related disasters can seriously affect present and future development plans. Therefore, it is essential to integrate climate risks into development planning in order to minimize potential losses. In this context, for the Agriculture sector, it is important to include climate-resilient measures such as weather- and agro-advisory services, micro-irrigation, crop diversification, and activities related to soil and water conservation.

Along with this, discussions were also held on the importance of climate vulnerability assessment at the block and local levels, institutional linkages, and gender-responsive planning. It was emphasized that development plans should specifically ensure the active participation of women, particularly in livelihood-related and community institutions.

During the discussions, participants also highlighted the need to document traditional knowledge and adopt modern technologies to ensure climate-resilient agriculture and efficient water management in response to climate change.

In the course of the discussion, some key activities related to the Agriculture and Water sectors emerged to address climate risks, which are as follows:



Agriculture Sector:

- Crop diversification
- Soil and land management
- Improvement of soil health
- Use of organic inputs
- Adoption of crop rotation
- Use of locally available natural resources
- Supportive livelihood activities such as animal husbandry, dairy production, fisheries, and kitchen gardening, etc.



Water Sector:

- Maintenance of ponds and wells
- Recharge of wells
- Cleaning and desilting of water bodies
- Water budgeting
- Use of multiple sources of irrigation

RECOMMENDATIONS FOR THE AGRICULTURE AND WATER SECTORS UNDER THE SAPCC

During this session, participants were familiarized with the strategies and actions proposed under the State Action Plan on Climate Change (SAPCC) to strengthen the Agriculture and Water sectors. Emphasis was placed on integrating climate-smart agricultural practices, efficient water use, water budgeting, and groundwater recharge activities into Block and Gram Panchayat Development Plans by linking them with existing government schemes and programmes.

Overall, it was stressed that for ensuring long-term resilience and livelihood security, and for achieving sustainable and inclusive development, it is essential to incorporate the strategies recommended under the SAPCC into local development plans.

ORIENTATION ON RISK-INFORMED AND GENDER-RESPONSIVE BLOCK PANCHAYAT DEVELOPMENT PLANS

The main objective of this session was to build participants' understanding of preparing Risk-informed and climate-resilient Block Panchayat Development Plans by integrating climate change adaptation and disaster risk reduction into decentralized planning processes. Through presentations, the constitutional powers of Panchayati Raj Institutions under the 73rd Constitutional Amendment were explained, and the role of Block Panchayats in ensuring sustainable local development through participatory processes was highlighted. It was also discussed that while planning—especially in the Agriculture and Water sectors—it is essential to identify local climate and disaster risks, assess vulnerabilities and capacities, and prioritize development interventions that reduce risks while promoting sustainable livelihoods.

In addition, emphasis was placed on recognizing women as key stakeholders in agriculture and water management, ensuring their participation in planning processes, and aligning Block-level priorities with the needs of Gram Panchayats. The session further

explained that climate-sensitive BPDPs can serve as an effective platform for coordinating plans and resources across sectors such as agriculture, water, livelihoods, and social development, thereby strengthening climate resilience.

The session also outlined the institutional arrangements required for implementing climate-resilient and inclusive Block-level development plans, the stages of plan preparation, mechanisms for community participation, and the requirements and availability of natural, human, and financial resources.

While developing climate risk-informed BPDPs, special focus should be given to Agriculture and Water-related interventions. Some indicative examples include:

Key Strategies for Integrating Climate Change Adaptation in the Agriculture Sector

- **Crop diversification:** Promote pulses, oilseeds, vegetables, medicinal, and high-value crops based on local water availability and market demand.
- Promotion of drought-resilient farming practices.
- **Improvement of soil health:** Nutrient management based on Soil Health Cards; promotion of organic, natural, and zero-budget farming.
- **Water-efficient irrigation technologies:** Promotion of drip, sprinkler, and micro-irrigation systems.
- **Value chain development:** Strengthening linkages with processing units, cold storage facilities, and e-marketing platforms.

Key Strategies for Integrating Climate Change Adaptation in the Water Sector

- **Water conservation and harvesting:** Construction of farm ponds, check dams, percolation tanks, recharge wells, and nala bunds.
- **Rejuvenation of water bodies:** Removal of encroachments and cleaning of ponds, lakes, drains, and rivers.
- **Surface and groundwater management:** Preparation of village-level water budgets and aligning cropping plans with water availability.

↘ **Balancing surface and groundwater use:**

Diversification of irrigation sources.

Gender sensitivity: A cross-cutting issue for climate change adaptation

Under this, it was highlighted that by building the capacities of women farmers and Self-Help Groups, rural livelihoods can be strengthened on the one hand, while the local economy becomes more robust on the other. At the same time, social empowerment can be enhanced. Gender-responsive and inclusive development planning strengthens climate change adaptation and disaster risk reduction, thereby making communities more resilient and self-reliant.

KEY DISCUSSION POINTS EMERGED IN THE WORKSHOP

From the open discussions held during the orientation workshops organized in all 47 blocks, several key issues emerged that need to be addressed in order to ensure sustainable development through Block and Gram Panchayat Development Plans and to make communities resilient to climate risks:

↘ **Increasing workload of women in the context of climate change:**

Whether due to rising temperatures, reduced rainfall, or sudden heavy rainfall, women's workload has increased in all situations. They have to travel longer distances to arrange drinking water. Although government data indicate that more than 95% of households in all blocks of the seven districts of Bundelkhand have tap water connections, women still have to travel 2–3 km to collect potable water. Similarly, during periods of low or excessive rainfall, weed growth in fields increase rapidly, and the primary responsibility for removing it falls on women.

↘ **Limited participation of women in capacity building and extension programmes:**

Migration is a major issue in the region, and when men migrate, almost all agricultural work is carried out by women. However, women's participation in capacity building and extension activities remains very limited.

↘ **Livelihood insecurity among women:** Due to climate-induced risks affecting agriculture, employment opportunities for women as

agricultural labourers at the village level are declining.

↘ **Unequal wages for equal work:** Women not receiving equal wages for equal work also emerged as a major concern.

In this context, several priority needs were also identified:

- ↘ Cleaning water sources removes silt and debris and allows water to percolate downward. This enhances both water storage and groundwater recharge.
- ↘ Integrated farming and livestock systems should be promoted, along with a return to traditional farming practices and indigenous breeds.
- ↘ Micro-irrigation should be promoted.
- ↘ The cultivation of paddy should be discouraged in Bundelkhand by withdrawing "Minimum Support Price" incentives for the region.
- ↘ Youth and women farmers should be trained on water conservation and agriculture-related schemes.
- ↘ Coordination among all responsible departments should be strengthened, and block-level teams should be formed for climate risk management.
- ↘ Local resource-based employment should be promoted.
- ↘ Water bodies at the village level (ponds, wells, etc.) should be cleaned, recharged, and better managed.
- ↘ Measures should be adopted to enhance women's participation in decision-making at Panchayat and community levels.
- ↘ Crops requiring less water should be promoted.
- ↘ Local Panchayat leaders and all relevant government departments must be mandatorily involved in climate-resilient planning.
- ↘ Awareness should be created on efficient water use for domestic and irrigation purposes.
- ↘ Communities should be sensitized about preparing and using organic manure.

Conclusion

Finally, considering the vulnerabilities of the blocks in the context of climate risks in Bundelkhand, it was strongly felt that all stakeholders associated with Block Panchayat Development Plans and Gram Panchayat Development Plans must be sensitized about climate change and the risks arising from it. All participants agreed that unless blocks are viewed through a climate change lens—particularly with an understanding of Agriculture- and Water-related vulnerabilities—and unless women’s active participation is ensured at all stages, from planning to implementation and monitoring, the prospects for sustainable development will remain limited. It was also emphasized that convergence with MGNREGA, NRLM, and other development schemes must be ensured.



Insights from Block workshops



We do not let water go to waste. We have planted Mango, Amla, Jackfruit, Lemon, and Curry leaf saplings near our doorway. Even when we wash our hands, we do so under these plants so that they also receive water and the water seeps into the soil as well.

Shobha Devi,

President of the Kali Self-Help Group formed in Mangraul Gram Panchayat, Mahewa Block, district Jalaun



Declining monsoon rainfall directly impacts sowing decisions and groundwater recharge, which we are already experiencing on the ground. We need to strengthen water-use efficiency and promote climate-resilient crops to cope with these changing patterns

Mr. Gambheer Singh,

Pradhan, Sabua, Charkhari Block, district Mahoba



In risk-informed Panchayat Development Plans, community accountability must also be ensured for the activities identified and their implementation. In Chandauli Gram Panchayat of Kabarai Block, under the Har Ghar Jal Nal scheme, pipelines were laid and taps were installed in front of every house, but people removed the taps. Now wooden plugs have been fitted to stop the flowing water, which causes continuous leakage. If asked about it, people are ready to quarrel”.

Ms. Laxmi Vishwakarma,

Panchayat Assistant, Bara, Kabarai, Mahoba



“The program has clearly demonstrated the need to integrate climate risk considerations into routine block-level planning. Convergence among line departments is essential to ensure that interventions in agriculture, water, and livelihoods are sustainable and responsive to emerging climate challenges.”

Mr. Aashish Katiyar,

DHO (Acting BDO, Sumerpur Block, Hameerpur)

Annexure

Workshop Agenda

Time	Agenda
9.30 – 10.00 am	Registration of Participants
10.00 – 10.30 am	Welcome, Introduction of Participants, Context Setting
10.30 – 10.45am	Objectives of the project and the workshop
10.45 – 11.30am	Sharing of District Climate Risk Analysis particularly, related to Water and Agriculture sectors, as per UPSAPCC
11.30 – 11.45am	Tea break
11.45 – 12.00pm	Need and approaches to mainstream climate risks in developmental plans
12.00 – 12.30pm	Introducing recommended strategic directions and actions of SAPCC related to Agriculture and Water Missions
12.30 – 1.30pm	Orientation on developing risk informed and gender-responsive Block Panchayat Development Planning, mainly focussing on water and agriculture sectors
1.30 – 2.00pm	Wrap Up and Way Forward
2.00pm onwards	Lunch and Departure

