

DISASTER REHABILITATION IN THE HILL STATE UTTARAKHAND, INDIA

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Abstract: *In the most disaster vulnerable hill state of Uttarakhand due to the natural and manmade disasters every year unsafe villages for the human settlement have emerged. Consequently, families of the large number of these disaster vulnerable villages have been demanding their rehabilitation in the safer place for the last several years. Though in year 2011, the State Government formulated the Resettlement and Rehabilitation Policy for specific purpose of rehabilitating disaster vulnerable villages and families in safe place but in the public domain, but to date, there is no information about the identification, geological survey and rehabilitation of disaster vulnerable villages and families in safer place. To fill-up the gap of this information, the study is conducted, which informs that for last several years, disaster vulnerable villages and families have continuously been identified and their geological survey has also regularly been done. The rehabilitation of disaster vulnerable families has continuously been done since 2012 onwards. To avoid the financial burden, the State Government has mainly focused on reconstruction of houses of the disaster victim families in another location nearer to their native place. The slow pace of undertaking rehabilitation has created many challenges before the poor resourced disaster victims. In absence of Government's support, unknowingly shifting of the poor disaster vulnerable families to unsafe place is further a matter of the great concern.*

This paper is the part of ongoing research titled Status of Resettlement and Rehabilitation of the Disaster Vulnerable Families in the Safer Place in Uttarakhand, India, supported by the Indian Council of Social Science Research, New Delhi.

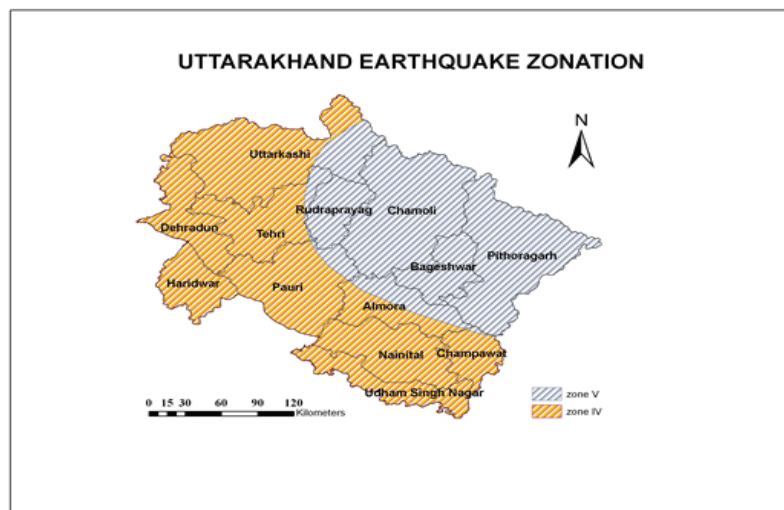
Keywords: *Disaster, Families, Hill State, Resettlement, Rehabilitation, Uttarakhand, Villages, Vulnerable*

INTRODUCTION

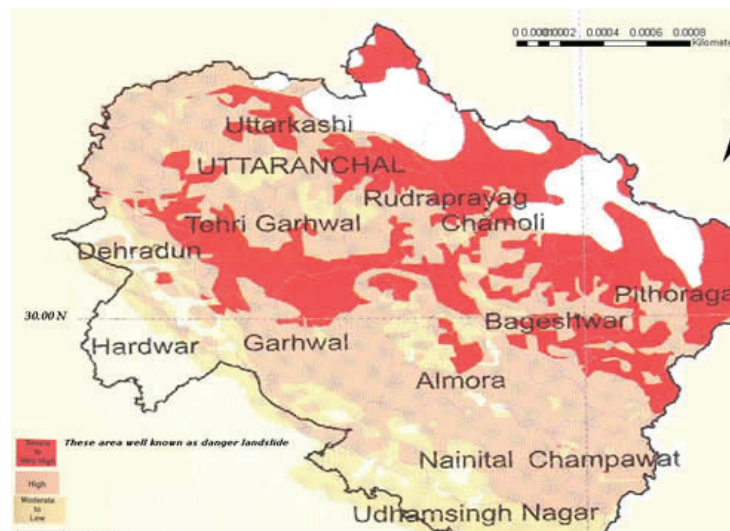
The State of Uttarakhand, by virtue environmentally fragile with adverse geographical conditions, has always been a disaster vulnerable Indian Hill State. Its eleven districts, out of its thirteen districts, lying in the hill region covers around 91 percent of the State's total area and bears 65 percent of the State's total populations. The nature resources, animal husbandry and tourism are key livelihood sources of State's around 90 percent of the populations (Singh, 2015). The State experiences threats of disasters like earthquakes, landslides, cloudburst, flash floods, floods, avalanches, drought, lightening, clod waves and hailstorm. As per report of the Ministry of Earth Science, Government of India, State's 24 areas spread in 344 locations are unstable zone due to occurrence of landslide (Kumar, 2016). It is why the Geological

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Survey of India recognizes that it is the most landslide prone state in the nation (Hindusthan Times, undated). The unpredictable earthquakes are the most devastating disaster in the mountain (Comptroller and Auditor General of India, 2010). Consequently, the citizens and properties in the State- highly vulnerable to several disasters- every year face massive losses particularly during the monsoon season, due to mainly landslides induced by cloud burst, flood, water logging, flash flood and earthquake events. Apart from experiencing disruptions in public infrastructures (transport, water supply, telecommunication), the State also faces loss of other private and public infrastructures. Its population- largely dependent on agriculture and livestock with mainly small and marginal lands (being in large number in the State, especially in the hill region) -loses the substantial portion of their agricultural produces and sometimes loses agricultural lands permanently due to these events (State Disaster Management Authority, 2014; State Disaster Management and Rehabilitation Department, undated). The transformation of the hill region into the more susceptible to landslides, avalanches, flash floods and anti-climate resilient developments works



Source: <http://dmcc.uk.gov.in/pages/display/95-earthquake-zone>



(Prashant, 2013 ; National Institute of Disaster Management 2000), as per State Disaster Management and Rehabilitation Department (undated), has made large number of villages in the State unsafe for the human settlements. Consequently, families of the disaster unsafe villages demand their resettlement and rehabilitation in the safer place from the State Government and public representatives. As per Kumar (2016) in the state, the disasters (like landslides and flash flood) have also been compelling the people to migrate from the hills for the last many years. During the period of last seven years, number of identified disaster vulnerable villages seeking their rehabilitation in the safer place has increased from 83 villages in year 2007 to around 1000 villages in year 2013 (Table 1). The rehabilitation

Table 1: Rehabilitation Seeking Disaster Vulnerable Villages in Uttarakhand

Year of Reporting	Rehabilitation Seeking Number of		Sources of Information
	Villages	Families	
2007	83	Not Available	Pande & Pande, 2007
2008	100 (80 villages in Five districts)	3039 (1976 families in Five Districts)	CAG, 2010
2010	239 (unsafe)		Prasant, 2013
2013	1000		Chandra, 2013
2013	572 (239 old and 233 new unsafe villages)		Prasant, 2013
2013	365 Plus		Bhatt, 2013
2014	350 Villages		Tribune News Service, 2016
2016	300		Chakrabarty, 2016
2016	341		Abhin, 2016

Note: Five districts include Chamoli, Pauri, Dehradun, Pithoragarh and Uttarkashi

Different sources report different number of disaster vulnerable villages in year 2013 process includes Physical (Relocation), Social and Economic (not the Psychological) components (State Disaster Management and Rehabilitation Department, 2011). As per the State Disaster Management and Rehabilitation Department (undated), the rehabilitation reconstruction and recovery aim restoring of the affected structures to a condition equal to better than what existed before the occurrence of disasters.

1.1. Central and State Level Policy Measures for the Resettlement and Rehabilitation of Disaster Vulnerable Families in Safer Place

In India, the disaster management is a state subject. The first national policy on resettlement and rehabilitation, formulated in year 2003, was limited to the project / development work affected families. Later, considering the limitations of the Policy 2003, a second National Policy on Resettlement and Rehabilitation was formulated in year 2007 for involuntary displacement of people caused by development and other factors. The provisions of the Policy 2007 comprehensively provide for the basic minimum requirements and address resettlement and rehabilitation issues of involuntary displacement of people permanently due to any other reason (Ministry of Rural Development, 2007). It is noticeable that prior to formulation of the Resettlement and Rehabilitation Policy, resettlement and rehabilitation of disaster vulnerable families in India was being done by the State Governments through its sector or specific project related order or resolutions (Pandey and Pandey 2007). In year 2009, the Central Government through the National Policy on Disaster Management 2009 first time addressed rehabilitation component of the Disaster Management by asserting on incorporation of the Build Back Better Approach, owner driven reconstruction, speedy permanent reconstruction including house construction within two or three years and linking recovery with safe development and livelihood restoration. The State Governments is required to give emphasis on the restoration of the disaster affected permanent livelihood and special attention to the needs of women headed households, artisans, farmers and people belonging to marginalized and vulnerable sections (National Disaster Management Authority, 2009). Later in the National Disaster Management Plan 2016, rehabilitation and its various components were explained in detail and fund mobilization strategy for undertaking reconstruction and recovery measures was emphasized (National Disaster Management Authority, 2016). At the state level, for effectively addressing the disaster management, the State Government of Uttarakhand is the most probably the first state in India, which created a separate department for the disaster management and rehabilitation (Environment Protection and Pollution Control Board, 2004). The department equally aims to focus on the rehabilitation by providing the quick and effective support to the disaster victims and making efforts for recovery of their socio-economic status (State Disaster Management and Rehabilitation Department, 2015). Aftermath of occurrence of severe 2008 and 2010 disasters, the State Government finally formulated its own Resettlement and Rehabilitation Policy in year 2011 for extremely disaster vulnerable villages and families to resettle and rehabilitate them in safer place. Through the Policy 2011, most probably first time in India, the State Government of Uttarakhand

targeted resettlement and rehabilitation of families living in the most chronically disaster vulnerable villages. As per the State Disaster Management and Rehabilitation Department (2011), the Policy 2011 notified guidelines for rehabilitation of disaster vulnerable villages and families. These guidelines asserted on identification of the safest location in proximity to the present unsafe location for habitation so that for their survival, rehabilitated families can perform the agricultural activities from the ancestral land and traditional business. It was further asserted that before displacing families, due consideration was expected for obtaining advice of the technical experts for making the place safer by considering the safety options. The families identified for rehabilitation was to be taken into confidence during developing their rehabilitation plan and their activities by ensuring their active participation. In the area identified for rehabilitation, both land and financial assistance for house construction were to be provided to the families, those had possessed house in the disaster affected area. In case, rehabilitated families were not able to use their agricultural land, new agricultural land was to be provided to them alternately amount, calculated on the basis of circle rate, was to be given them. The house to the families below poverty line (BPL) was to be provided under various Central and State Government Schemes. The financial aid for improvement of barren land; construction of shed for animals; rehabilitation allowance for transportation of personal assets and other materials; and aid to artisans to start their own business in a new place was to be provided to the disaster affected families. In rehabilitation, priority was to be given to the extremely disaster vulnerable villages. The job of identification of families in these villages was to be completed on the basis of habited families by 7th July, 2011. As per the State Disaster Management and Rehabilitation Department (undated), the families living after the said date were not eligible for relief or rehabilitation. Thus, as per the State Disaster Management and Rehabilitation Department (2011), through the Policy 2011, both land and financial aids (**Table 2**) were to be provided to the identified extremely disaster vulnerable families for their rehabilitation. Later, in wake of 2013 disaster, after assessing the rehabilitation cost of the disaster vulnerable villages, by stating crunch of resources of fund and land, in year 2013 the State Government approached the Central Government for extending the financial support of Rs.10,653.38 Crore for rehabilitating 304 chronically disaster vulnerable villages (State Disaster Management and Rehabilitation Department, undated). Instead of supporting to the States, the Central Government denied extending financial assistance for rehabilitation of disaster vulnerable families by saying that the resettlement and rehabilitation of disaster vulnerable families was the responsibility of the only State Governments (Press Information Bureau, 2016). Later, on the ground of land and fund crisis, the State Government decided to undertake resettlement and rehabilitation measures (State Disaster Management and Rehabilitation Department, 2015) through both the State Policy 2011 and Owner Driven Construction of House (ODCH) Scheme. The ODCH Scheme- one of the components of the

Table 2: Major Provisions of the State Resettlement and Rehabilitation Policy 2011

S.N.	Head of Provisions	Details of Provisions
1	Land for House Construction	250 Square Meter Free of Cost
2	Financial Assistance for House Construction	Initially Rs. 3 Lakh per Family but later Increased to 4 Lakh per family
3	House to BPL Families	Under various Central and State Government Schemes.
4	Financial Assistance for Cowshed Construction	Rs.15,000 per Cowshed
5	Agricultural land	New Agricultural Land or Amount at the Circle Rate
6	Improvement of Infertile Land	Rs. 15,000 per hectare
7	Transportation of Household Goods	Rs. 10,000 per Family
8	Rehabilitation of Rural Artisan and Entrepreneurs	Rs. 25,000 per Person

Source: State Resettlement and Rehabilitation Policy 2011, State Disaster Management and Rehabilitation Department, Government of Uttarakhand.

World Bank supported Uttarakhand Disaster Recovery Project (UDRP) - was introduced to benefit the families only affected by the 2013 disaster (Flash Flood). In the project, with motto of Built Back Better Safer and Stronger Uttarakhand, the victims of 2013 disaster were only targeted to provide them earthquake seismic resistant house only in five severely affected districts (Bageswar, Chamoli, Pithoragarh, Rudraprayag and Uttarkashi). In rural areas of these five districts on the basis of the Joint Rapid Damage and Need Assessment Report, prepared in wake of 2013 disaster, against total reported damaged 2408 permanently and partially damaged houses, construction of 2410 houses was planned in ODCH Scheme (World Bank, Asian Development Bank and Government of Uttarakhand, 2013). Later, in year 2014, by removing the condition of construction of houses in their original native places, the State Government allowed disaster victims to get the house constructed in any district under the ODCH scheme. Due to the lack of suitable land with many disaster victims, priority was to be given to disaster victims; those were lacking suitable land by identifying the land closer to their houses or available land through the geological survey. In absence of government land, the land was to be purchased for house construction (State Disaster Management and Rehabilitation Department, 2014).

In year 2015, by taking the ground of holding limited resources, the State Government took decision of undertaking rehabilitation of only extremely natural disaster vulnerable villages, those were to be selected through a process of dividing all the 341 most chronically disaster vulnerable villages into three categories (extremely, highly and sensitive). For their classification, following issues were also to be considered: (i) number of disaster vulnerable families / population, (ii) vulnerability of disasters, (iii) urgency status of displacement on the ground of vulnerability of disasters (iv) current status and (v) last incidence of disaster, which created need of the displacement of disaster vulnerable villages and families. The list of classified disaster vulnerable village was to be sent by the 28th August, 2015 to enable

the State Level Committee to decide priority of disaster caused unsafe villages for their rehabilitation (State Disaster Management and Rehabilitation Department, 2015). Later, after two years in year 2017, the amount of financial assistance for house construction was increased to Rs. 4 Lakh per family from Rs. 3 Lakh per family (State Disaster Management and Rehabilitation Department, 2017). The District Magistrates were also directed to create the land bank of the disaster free land through the geological survey (State Disaster Management and Rehabilitation Department, 2015).

Thus, formulation of own Resettlement and Rehabilitation Policy 2011 was the significant measure of the State Government towards resettlement and rehabilitation of the disaster vulnerable villages and families. By complying the provisions of the Policy 2011 and ODCH Scheme, resettlement and rehabilitation of the disaster vulnerable villages and families was to be done as early as possible within stipulated time of two or three years since their identification as unsafe villages. During rehabilitating disaster vulnerable families, the physical, social and economic components of the rehabilitation process and their active participation in the identification and rehabilitation processes were also to be ensured. But unfortunately, in the public domain, neither the clear picture of the identified disaster vulnerable villages nor the rehabilitation status of these identified villages and families in the safer place is available. Consequently, in this backdrop to fill the gap of information about the identified and rehabilitated disaster vulnerable villages and families in the State, this study was conducted; so-that learning can be applied in improving the rehabilitation process.

AIM OF THE STUDY

The study aims to bring out clear picture of undertaken resettlement and rehabilitation of the disaster vulnerable villages and families in safer place in the entire Hill State Uttarakhand.

RESEARCH METHODOLOGY OF THE STUDY

The study paper is primarily based on the secondary data obtained from various sources including the State Government departments. The paper covers only the household level resettlement and rehabilitation aspects of the rehabilitation component of the disaster management but does not cover reconstruction of the community facilities.

RESULTS

The analysis of obtained secondary data brings out the below mentioned research question wise results:

4.1. Identification and Conduction of Geological Survey of Disaster Vulnerable Villages and Families in Uttarakhand

The scrutiny of available documents shows that though the entire state's population is by virtue at the risk of disasters but reporting of occurrence of disaster vulnerable villages followed by raising demand by the disaster unsafe families for their rehabilitation in safer

place had started several years back. The identification and conduction of the geologically survey of the disaster vulnerable villages had been regular processes towards undertaking necessary rehabilitation and protection measures. Consequently, number of identified disaster vulnerable villages had increased from 233 in year 2010-11 to 395 in year 2016-17 while number of geological surveyed disaster vulnerable villages had increased from (more than) 86 in year 2010-11 to 225 in year 2016-17 and number of disaster caused unsafe villages (declared after their geological survey) had increased from 70 in year 2008-09 to 237 in year 2014-15 (Table 3).

Table 3: Status of Identification and Conduction of Geological Survey of Disaster Vulnerable Villages in Uttarakhand

Reported Year	Number of Disaster Vulnerable Villages			
	Identified	Geological Surveyed	Unsafe	Rehabilitated
2008-09			70	
2009-10			99	
2010-11	233	86 +	100	
2011-12	233	100		
2012-13	233	115	80	1
2013-14	337	158		0
2014-15	237/341	237/200	237	1
2015-16				0
2016-17	395	225		0
2017-18		*73	51	11
2018-19				6
2019-20				#6

Note: ambiguity or contradiction in number of identified disaster vulnerable villages is because of differences in data sources

* 73 extremely disaster vulnerable villages were re-selected from already identified and geologically surveyed 341 most chronically disaster prone villages

status upto May / November, 2019

Sources: State Planning Commission and State Disaster Management and Rehabilitation Department, Government of Uttarakhand.

On analysis of Table 3, it is found that during the year 2017-18, number of both geologically surveyed villages and unsafe villages had reduced to 73 and 51 respectively. On investigation, it is found that after completing the initial phase of geological survey of all the identified most chronically disaster vulnerable villages, by taking the ground of fund and land crisis, in the next phase of geographical survey, the State Government did re-geological survey of selected 73 extremely disaster vulnerable villages in year 2017-18 to identify and prioritize rehabilitation seeking extremely disaster vulnerable villages. These 73 villages were selected among the 341 most chronically disaster vulnerable villages (Annexure Table 1). As per the State Disaster Management Authority (2014), surprising issue is that these 341 most chronically disaster vulnerable villages, first time publically reported in wake of 2013

disaster, were already declared unsafe for the human settlements due to their continuous vulnerability to and adverse impact of the disasters (mainly landslides) in the past years. In re-geological survey of 69 (not 73) extremely disaster vulnerable villages, 54 extremely disaster vulnerable villages in eight districts were found unsafe while 15 extremely disaster vulnerable villages in three districts were found in need of the protection measures. Out of State's eleven most chronically disaster vulnerable districts, three districts

Table 4: Details of 73 Extremely Disaster Vulnerable Villages in Uttarakhand Before and After their Re-technical Assessment

S.N.	Districts	Most Chronically Disaster Vulnerable Villages	Details of 73 Extremely Disaster Vulnerable Villages Before their Re-Technical Assessment		Details of 73 Extremely Disaster Vulnerable Villages After their Re-technical Assessment	
			Extremely Villages	Extremely Vulnerable families	Require Rehabilitation	Require Protection Measures
1	Bageshwar	42	3	31	2	1
2	Pithoragarh	129	21	582	12	9
3	Udham Singh	1	0	0		
4	Champawat	10	0	0		
5	Nainital	6	3	158	3	
6	Almora	9	3	84	2	
7	Haridwar	0	0	0		
8	Uttarkashi	62	11	1149	10	
9	Pauri Garhwal	26	0	0		
10	Tihri Garhwal	33	8	507	8	
11	Chamoli	61	17	888	10	5
12	Rudraprayag	14	7	92	7	
13	Dehradun	2	0	0		
	Total	395	73	3491	54	15

Source: List of 73 Extremely Disaster Vulnerable Villages, State Disaster Management and Rehabilitation Department, Government of Uttarakhand and Letter dated 13th Jan, 2017, Geology and Mining Unit, Government of Uttarakhand

Note: Technical assessment of 4 villages could not be done.

Table 5: Details of Identified 51 Extremely Disaster Vulnerable Villages in Uttarakhand

S.N.	Districts	Total Number of villages	Number of Villages Having Land	Number of Villages Lacking Land	Number of Villages having Unsuitable Land	No information
1	Uttarkashi	10	10			
2	Tihri	8	4	2	2	
3	Pithoragarh	12	5	7		

4	Chamoli	10	8	1		1
5	Bageshwar	2	2			
6	Almora	2	2			
7	Rudraprayag	7	6	1		
	Total	51	37	11	2	1

Source: Letter dated 27 June, 2016 of the Deputy Director, Geology and Mining Unit, Uttarakhand written the Executive Director, DMMC– Regarding Geological Survey of Disaster Sensitive Villages

(Champawat, Pauri Garhwal and Dehradun) were not having any extremely disaster vulnerable village (Table 4). In survey report, ranking of 54 extremely disaster vulnerable villages was also done based on level of their vulnerability to the disasters. However, initially among re-geologically surveyed 69 (out of 73) extremely disaster vulnerable villages, 51 extremely disaster vulnerable villages in eight districts were found unsafe. Out of these 51 villages, 37 villages had own land for rehabilitation while 11 villages were lacking land and 2 villages had unsuitable land (Table 5). Thus, by following the guidelines of the Policy 2011, according to the set priority order of these 54 extremely disaster vulnerable villages, their rehabilitation was to be done within stipulated time of two or three years in the safer place. It was also apprised that after completing rehabilitation works in 54 extremely disaster vulnerable villages, re-geological survey of rest 322 (395-73) most chronically disaster vulnerable villages was to also be conducted to identify and prioritize rehabilitation seeking disaster vulnerable villages towards undertaking their rehabilitation in safer place.

On the basis of the above facts, it is clear that the entire State of Uttarakhand was continuously witnessing a continuous increase in most chronically disaster vulnerable villages and demand for their rehabilitation in safer place for the several years back. It is also found that apart from identification of disaster vulnerable villages, their geological survey followed by declaration of disaster unsafe villages was also continuously being done. After completion of geological survey of all identified 341 most chronically disaster vulnerable villages, by taking ground of resource crisis, the State Government further carried out geological survey of the 73 extremely disaster vulnerable villages identified among 341 most chronically disaster vulnerable villages and found 51 extremely disaster vulnerable villages unsafe for the human settlement. Of it, majority of extremely vulnerable villages had own land for their resettlement and rehabilitation. After completion of identification of unsafe villages, their rehabilitation was expected to be undertaken as early as possible within period of two or three years.

4.2. Rehabilitation of Disaster Vulnerable Villages & Families

After formulation of the State Policy 2011, the State Government started working on the rehabilitation of the disasters caused unsafe villages and families through both the Owner Driven Construction of House (ODCH) Scheme and State Policy 2011 and. The details of rehabilitation of disaster vulnerable villages and families undertaken through these policy measures are given below:

4.2.1. Rehabilitation Measures through OCDH Scheme

In the Owner Driven Construction of House (OCDH) Scheme, by giving priority to the land holding disaster unsafe households for the reconstruction work, the State Government allowed them to settle down in State's any safer place. And, against the total planned 2410 houses, the State Government constructed only 2382 houses in the five most 2013 disaster affected districts (Table 6). The scheme led entire constructed houses were insured for next 10 years against the damage caused by the 15 types of disasters. Under the scheme, Rs. 5 Lakh was given to each household to construct the house (State Disaster Management and

Table 6: Details of Houses Constructed under the ODCH Scheme in Uttarakhand

District	Total Beneficiaries in ODCH	Actual Beneficiaries in ODCH	Insurance to Beneficiaries	Retrofitting Houses	Other District allotted in ODCH	Land Arranged by District
Bageshwar	96	96	96	06	0	30
Chamoli	581	529	573	47	101	36
Pithoragarh	656	636	652	87	77	22
Rudraprayag	860	826	833	125	130	04
Uttarkashi	290	295	296	31	15	06
Total	2488	2382	2450	296	323	98

Source: PIU Resilient Housing and Public Buildings
<http://ukdisasterrecovery.in/index.php/projects/udrp1/hpb>

Rehabilitation Department, 2016). Out of 2382 households, 2284 (95.72 %) households had own land for their house construction while 98 (4.28%) households were given the land by the Government for their house construction. On comparing 2013 disaster caused fully and partially damaged 19309 houses (16879 Pukka and 2430 Kutcha) and 361 cowsheds (State Emergency Operation Centre, 2013), construction of only 2382 houses is inadequate and beyond the logic. And, leaving of the rest disaster affected families over them to re-construct their own houses from the ex-gratia money paid by the Government as a relief measure is also not justifiable because the ex-gratia amount is a very small amount as compared to the cost of land and house construction in the hill region. Moreover, reconstruction of house is more difficult for the ex-gratia payment deprived disaster affected families to reconstruct their own houses in another safer place. It is also mentionable here that the Uttarakhand Disaster Recovery Project (UDRP) had mainly focussed on the reconstruction of community facilities. Conclusively, ODCH scheme had targeted limited number of 2013 disaster vulnerable families by addressing their physical rehabilitation component (house construction) of the rehabilitation approach.

4.2.2. Rehabilitation Measures through Resettlement and Rehabilitation Policy 2011

In addition to the rehabilitation work done under ODCH scheme, by complying the provisions of the Policy 2011, year 2012 onwards in the State, resettlement and rehabilitation process

had started. Between the period of last seven years from year 2012 to year 2019, 634 families of 25 extremely disaster vulnerable villages had been shifted near to their native places by incurring an amount of Rs. 26.94 Crore (Table 7). It is also found that during the period of last three years from year 2012-13 to year 2014-15, 11 families of only two villages while during the period of last three years from year 2017-18 to year 2019-20, 623 families of 23 villages had been rehabilitated. It is notable that during the last three years from year 2017-18 to year 2019-20, large number of disaster affected families were rehabilitated due to pressure developed over the State Government in wake of 2013 disaster. Overall, against the planned rehabilitation of 939 families of 34 extremely disaster vulnerable villages during the period of last seven years from year 2012 to year 2019 (till October, 2019), rehabilitation of 634 families of 25 extremely disaster vulnerable villages in five districts were done (Table 8). In other words, rehabilitation of average 25 families of around four villages per year was done during the last seven years. It is also found that set priority order for undertaking rehabilitation of extremely disaster venerable villages was not being followed-up both in sanctioning rehabilitation fund and undertaking rehabilitation measures. The analysis of the sanctioned financial aid (Annexure Table 2) indicates clearly that financial support was approved mainly for construction of the houses and cowshed along-with transportation of the household goods. Only in Chamoli district, out of the five rehabilitation undertaken districts, financial aid for re-start of business was approved for 29 families. Also, in Chamoli district, for reconstruction of community facilities in only one village (16 families), Rs. 70.63 Lakh was sanctioned. The rate of financial support per family was also varying most probably due to the household specific requirements and increase of amount of the house construction (since year 2017). Thus, State Government had targeted mainly the sub-component of the physical rehabilitation of the rehabilitation approach (by reconstructing houses and cowsheds). Emphasis on other sub-components of rehabilitation approach like economic component was most probably not required due to shifting of families closer to their native

Table 7: Status of the Undertaken Resettlement and Rehabilitation Works in the Extremely Disaster Vulnerable Villages in Uttarakhand

S.N.	Districts	Extremely Disaster Vulnerable Villages				Number of Rehabilitated Families	Fund Allotment (INR Lakhs
		Name	Year of Approval of Rehabilitation Fund	Ranking of Villages	Number		
1	Rudraprayag	Chhatikhhal	May, 2012		1	4	13.00
		Semitalli, Kunjethi, Jaltalla, Kaviltha and Panjana	March, 2018	Kunjethi -45 Jaltall-50, Kaviltha-48, Panjana-49	5	56	237.70
		Rudraprayag Total			6	60	250.70
2	Chamoli	Jagadi Hamlet of Pharkandey Village	March, 2015		1	7	24.50
		Simar Faki and Lodh hamlets of Kanol Village	September, 2017	6	1	60	195.00
		Chhapali	March, 2018	42	1	7	29.75
		Tyula	May, 2018	43	1	21	89.25
		Baula	August, 2018	35	1	6	26.75
		Bhyadi	July, 2018	41	1	48	204.00
		Sarpali	December, 2018	39	1	38	165.75
		Gondi Giwala	October, 2019		1	4	18.00
		Chamoli Total			8	191	753.00
3	Bageshwar	Dobad, Badet, Seri	July, 2017	Dobad-7 Badet-16 Seri-	3	28	91.00
		Kunwari	July, 2017		1	18	76.50
		Phulai	August, 2019		1	5	20.95
		Bageshwar Total			5	41	188.45
4	Tihri Garhwal	Bhelunta Chherdanu	December, 2017	37	1	26	110.50
		Indraula	May, 2019	15	1	166	705.00
		Tyalani Tok Khalunda	September, 2018	19	1	20	85.00
		Agunda	May, 2019	17	1	99	420.75
		Tihri Garhwal Total			4	311	1321.25
5	Pithoragarh	Kanar Tok Toyla	May, 2019		1	5	21.25
		Takul Tok Mangati	August, 2019	11	1	16	138.63
		Pithoragarh Total			2	21	159.88
		Grand Total			25	634	2673.28

Source: Details of Undertaken Rehabilitation of Disaster Vulnerable Villages Provided by Disaster Mitigation and Management Centre, Government of Uttarakhand, Dehradun in October, 2019

Table 8: Details of Year-wise Undertaken Rehabilitation of Extremely Disaster Vulnerable Villages and Families in Uttarakhand

Year	Rehabilitation was to be done of Number of		Rehabilitated Number of	
	Villages	Families	Villages	Families
2012-13	1	4	1	4
2013-14	0	0	0	0
2014-15	1	7	1	7
2015-16	0	0	0	0
2017-18	12	177	11	177
2018-19	6	151	6	151
2019-20	14	330	6	295
Total	34	939	25	634

Note: Rehabilitation of Pulinda and Khurpal villages is planned in year 2019-20 but details of families and fund are not mentioned in list of proposed villages for rehabilitation. In year 2019-20, rehabilitation of 3 villages was already done and rehabilitation of 11 new villages was planned

Sources: Details of Undertaken Rehabilitation of Disaster Vulnerable Villages Provided by Disaster Mitigation and Management Centre in October, 2019 and GOs of between year 2012 to year 2019 and Updated List of Rehabilitation Villages, State Disaster Management and Rehabilitation Department

place. In other words, for reducing the economic burden of rehabilitation, the families were shifted closer to their native place. To cover-up the negligence of creating and keeping pending a long list of rehabilitation seeking disaster vulnerable villages and families increased by 2013 disaster, after a gap of several years of identification of disaster vulnerable villages, the State Government belatedly started their rehabilitation. In support of belated and slow pace of undertaking rehabilitation work, by raising the ground of lack of adequate resources for rehabilitating large number (about 300) of disaster vulnerable villages at one go was given, an intention of rehabilitating only 8 -10 villages per year was shared. Later, with intention of reducing economic liability of undertaking rehabilitation of large number of disaster vulnerable villages (already declared unsafe for the human settlement and seeking their immediate rehabilitation), the State Government reduced their number in the name of prioritising them through repeated geological survey of extremely disaster vulnerable villages (Chakrabarty, 2016). This tactic was ratified by the Geological Survey of India by sharing admission of the State Government about lacking capability of rehabilitating such a large number (761) of disaster vulnerable villages (Chandra, 2013). Prashant (2013) also received the remark of the politician disclosing lack of seriousness of the State Government towards rehabilitation of 472 villages since their reporting in year 2010. The Member of Parliament of Almora Constituency also criticised the State Government for adopting its casual approach in rehabilitating the disaster vulnerable families (Kasniyal, 2015). The Comptroller and Auditor General of India (2010), further in opposition of the State Government, also observed that in rehabilitation, very little initiatives in the state were undertaken. Many of villages declared unsafe years back, were not rehabilitated due to non-identification of land by the State Government for their rehabilitation (Bhatt, 2013;

Amar Ujala, 2015 & 2017; Hindustan, 2019). The insincerity of the State Government can also be understood from the observation by the Comptroller and Auditor General of India (2010) of not undertaking rehabilitation measures of 15372 families in 100 disaster vulnerable villages despite lapse of two years and ignoring rehabilitation of 500 families in selected landslides affected six districts. However, as per the Prashant (2013), the State's excuse of lacking adequate resources for not undertaking rehabilitation of already declared all unsafe villages was condemned by the Member of Parliament of Almora Constituency and one officer of the State Disaster Management and Rehabilitation Department. As per Chakrabarty (2016) many of the disaster victim families were deprived of financial assistance against their losses and the urgent need of creation of employment and livelihood opportunities in disaster affected areas was ignored for their survival (Maikhuri, Dhayni and Nautiyal, 2015). Also, as per Bhatt (2013), the disaster unsafe families were left with no option and as per Kumar (2016) due to the inadequate and untimely rehabilitation, large numbers of families in entire state were facing various kinds of problems and challenges. After year 2010, families in Chamoli and Uttarkashi had moved and settled in areas of Srinagar, Pauri and Dehradun and after 2013 disaster, 300 disaster affected persons were planning to settle down in the safer place in Dehradun. It was also found by Maikhuri, Dhayni and Nautiyal (2015) that more than 300 families had migrated from their native places and within 5-6 years, a major demographic shift from the hills to the places as well as towards townships of the hills was to be taken place. As per Chakrabarty (2016), many of 242 families in 15 villages in Almora had moved to higher places and constructed their houses by taking loans from bankers. However, as per Hindusthan Times (undated), the new places were also vulnerable and they would further need rehabilitation because of their resettlement in the unsafe place. More than 60 families of Uttarkashi had migrated to safer places and as per the Amar Ujala (2017), 126 families of five villages in Almora were compelled to live in the public places (panchayat ghar, schools, etc.) and rented house and facing many problems during winter and rainy seasons. 456 families of 2013 disaster in Pithoragarh had refused to stay in pre-fabricated house and agreed for own constructed home while 22 families were living in tents or in makeshift arrangements due to lack of proper resettlement and rehabilitation by the State Government (Markuna, 2013). The poor families of Indira Basti in Almora- reconstructed their kutch house in same vacated unsafe place- were compelled to live in an unsafe condition during the rainy season. Consequently, they became very disturbed (Hindusthan, 2019). And as per Bhatt (2013), over 10,000 families living in 365 disaster vulnerable villages of entire State were leading a nightmarish experience because of unsure of their future. Many of the families had moved to safer areas themselves while other with nowhere to go were continuing to live on at the nature's mercy.

Thus, on the basis of above facts, it is clear that the increasing number of disaster vulnerable villages in the State has been a matter of the great concern for the society, environmentalists and development professionals. For reducing the burden of rehabilitating large number of disaster unsafe villages and families, in name of identifying their priority for their rehabilitation, through repeat geological survey, number of rehabilitating seeking

disaster vulnerable villages was reduced. After formulation of the Policy 2011, during the period of last 7 years of undertaken rehabilitation measures through both the ODCH Scheme and Policy 2011, in the State's five most disaster affected districts, the State Government had mainly constructed the housing structures (physical component) for the families in the extremely disaster vulnerable villages near to their native place. Under ODCH scheme, inadequate numbers of land holding 2013 disaster affected families were given the priority by giving the financial assistance for houses construction while the large numbers of 2013 disaster affected families were left at the mercy of the disasters. And, through the Policy 2011 during the period of last seven years, small numbers of disaster caused unsafe families of few extremely disaster vulnerable villages in the five most disaster affected districts were shifted to safer place nearest to their native place. In their rehabilitation, focus was given mainly on reconstruction of the physical components (house and cowsheds). Out of five covered districts, only in Chamoli district, financial assistance was sanctioned for restarting of economic activities of very small numbers of families. The economic rehabilitation of large number of families in all the districts was not needed due to their shifting in the same villages. It is also found that post 2013 disaster; pace of rehabilitating families had increased due to the pressure developed over the State Government. Further, it is also found that rehabilitation deprived families of disaster caused unsafe villages were compelled to live on the mercy of disasters and somehow resource capable families had also shifted to another both safer and unsafe place at own. Overall, the pace of rehabilitation work was not only very slow but also was inadequate and unsafe. By ignoring emphasis of the rehabilitation policies, the State Government could not fulfill the urgent need of rehabilitation of the families living in the unsafe conditions. The slow pace of undertaking and pending rehabilitation measures were further creating a long list of rehabilitation seeking villages and multiplying their problems and challenges in the unsafe conditions.

CONCLUSIONS AND SUGGESTIONS

The turning of environmentally fragile State of Uttarakhand into the most disaster vulnerable Indian State has caused it to face the huge losses, be deprived of the developmental gains and bear large number of unsafe villages and families. Moreover, disasters have also compelled the people to look for an alternate safer place. Consequently, the State Government has faced demand of families of the disaster caused unsafe villages to rehabilitate them in safer place. In the State, many folds increase in the number of identified rehabilitation seeking disaster vulnerable villages during the last ten year has brought several challenges before the State Government. Meanwhile, addition of large number of disaster vulnerable villages by incidents of 2008 and 2010 disasters compelled the State Government to formulate own Resettlement and Rehabilitation Policy 2011 for rehabilitation of disaster vulnerable villages and families. Later, with intention of reducing liability of all rehabilitation seeking disaster vulnerable villages, many declared unsafe for human settlement before years back, in the name of prioritising their rehabilitation need, the State Government selected only 73 extremely disaster vulnerable villages for their repeat geological survey. Of it, 51 extremely

disaster vulnerable villages were found unsafe for the human settlement. Later, by stating lack of adequate resources to rehabilitate all the villages in one go, the State Government decided to rehabilitate 8-10 villages per year and during the period of last seven years, 634 families of 25 extremely disaster vulnerable villages in five most disaster vulnerable districts were rehabilitated in new place closer to their native place. In these five districts, emphasis was given mainly over reconstruction of houses and cowsheds (physical rehabilitation). The fund for small number of persons was approved for restart of their business activities (economic rehabilitation) only in one (Chamoli) district. Apart from undertaking rehabilitation work under the Policy 2011, the State Government against the demand of reconstruction of houses of the large number of 2013 disaster victims, under the ODCH scheme of the Uttarakhand Disaster Recovery Project, funded only 2382 families for reconstruction of their house. Thus, during the period of last seven years, only 3016 families were extended financial support for their physical rehabilitation while 29 persons were likely to be funded for their economic rehabilitation. The need and scope of economic rehabilitation was almost eliminated by shifting the families near to their native place.

Against the actual number of disaster victims waiting for their rehabilitation in all the disaster vulnerable villages in the entire state, number of the rehabilitated families is almost negligible. During the period of last seven years, the pace of undertaken rehabilitation work was also very slow, which kept life of thousands of disaster victims at the risks due to their waiting status. It was also found that considering rehabilitation a costly business, in absence of the Government's urgent rehabilitation support, resource deprived families of the large number of disaster vulnerable villages were forced to either live under the shadow of persistent risk of disasters or migrate from their own village to another safer location to re-continue their life. Considering the previous trend of slow pace of rehabilitation work undertaken during the last seven years, rehabilitation of families of large number of disaster vulnerable villages would take very long time and during this period, another large number of disaster vulnerable villages would emerge those would also be seeking their rehabilitation. Keeping the families in disaster created unsafe living conditions is denial of their constitutional rights and ignorance of sense of responsibility of the State at the cost of the life of innocent people. By ignoring their safer life, the State can never be a developed state.

Considering the need of rehabilitation seeking large number of disaster vulnerable villages, there is requirement of the incorporation of agenda of the long term rehabilitation in the disaster management and development plans. The need of disaster vulnerable villages and families for their rehabilitation is an urgent nature of work. It is why the National Policy on Disaster Management 2009 asserts rehabilitation of the disaster vulnerable families within two or three years. Though the State Government claims lack of both fund and land resources but with the support of the Central Government and development funding agencies, rehabilitation of the disaster vulnerable families can be done properly within short time. It would be possible, if the State Government has sense of ownership and responsibility of rehabilitating the families of all the unsafe villages. In their rehabilitation, the Central Government cannot ignore its responsibility as being the Federal Government

and revenue sharing partner, it is her secondary responsibility. By engaging the national and international level technical institutes and experts, disaster vulnerable villages can be identified and protection and rehabilitation measures can also be done properly. Moreover by addressing the needs of pro-environmental development approach and rehabilitating disaster vulnerable families in safer place, the State Government can minimize both risk of disasters and investment in relief works, ultimately benefiting the people to enjoy the development gains with minimum risks. In other words, rehabilitating the families in safer place is an opportunity for the State Government to make disaster resilient housing infrastructures to minimize the losses and associated costs.

References

- Abhin, M. (30 July, 2016). Do proper disaster mgmt: Experts. Bureaucracy Today Retrieved on January 4, 2017 from <http://bureaucracytoday.com/latestnews.aspx?id=151705>
- Amar Ujala (July 5, 2015). Aapda Prabhavit 316 Pariwar Visthapan ke Intejar Men, Almora
- Amar Ujala (November 25, 2017) - Kab Hoga 14 Gavon Ke 242 Pariwaron Ka Visthapan, Almora . Retrieved on February 7, 2020 from <https://www.amarujala.com/uttarakhand/almora/when-will-the-displacement-of-242-families-of-14-villages>
- Bhatt Jagdish (August 22, 2013). Over 365 Villages in Uttarakhand Await Rehabilitation, Dehradun, The Hillpost Retrieved on January 12, 2017 from <https://hillpost.in/2013/08/over-365-villages-in-uttarakhand-await-rehabilitation/95289/>
- Chakrabarty Arpita .(June 6,2016). 2010 U'khand landslides: Over 240 families in Almora Still Await Rehabilitation. The Times of India. Retrieved on January 12, 2017 from <https://timesofindia.indiatimes.com/city/dehradun/2010-Ukhand-landslides-Over-240-families-in-Almora-still-await-rehabilitation/articleshow/52625612.cms>
- Chandra Neetu .(July 1, 2013). Uttarakhand disaster: No help for hundreds of villages devastated by floods but relief and rations for some cut off from mainland. Mailonline India. Retrieved on January 12, 2017 from <https://www.dailymail.co.uk/indiahome/indianews/article-2353053/Uttarakhand-disaster-No-help-hundreds-villages-devastated-floods-relief-rations-cut-mainland.html>
- Comptroller and Audit General of India (2010). Report of 2010 - Performance Audit on Civil of Government of Uttarakhand, New Delhi, Government of India. https://cag.gov.in/sites/default/files/audit_report_files/Uttarakhand_Civil_2010.pdf
- Disaster Mitigation and Management Centre. (2019). Updated List of Undertaken Resettlement and Rehabilitation in Uttarakhand, Dehradun, Government of Uttarakhand.
- Disaster Mitigation and Management Centre. (undated). Updated List of 395 Most Disaster Chronically Disaster Vulnerable Villages, Dehradun, Government of Uttarakhand.
- Environment Protection and Pollution Control Board. (2004). State of Environment 2004. Dehradun. Government of Uttarakhand.
- Geology and Mining Unit (2017). Regarding Geological Survey of Disaster Affected Villages, Letter No. _____/Apda/U.Ni/Bhu.Khani.E /2016-17/ ____ dated 13th Jan, 2017), Dehradun, Government of Uttarakhand.
- Geology and Mining Unit. (2016). Regarding Geological Survey of Disaster Sensitive Villages, Dehradun,

- Government of Uttarakhand. Letter dated 27 June, 2016 of the Deputy Director, Geology and Mining Unit, Uttarakhand written to the Executive Director, Disaster Mitigation and Management Centre, Dehradun
- Hindustan Team .(August 13, 2019). Apda Prabhavit Indira Basti Ke 42 Pariwaron Ka Nahi Ho Paya Visthapan , Retrieved on 25th December, 2019 from <https://www.livehindustan.com/uttarakhand/almora/story-displacement-of-42-families-of-disaster-affected-indira-basti-could-not-happen-2687744.html>
- Hindustan times.(undated). No Lessons Learnt in Cloudburst-hit, landslide-prone Uttarakhand. Retrieved on January 4, 2017 from <http://m.dailyhunt.in/news/india/english/hindustan+times-epaper-httimes...>
- Kasniyal, B.D. (October 27, 2015). Disaster Affected Almora Villagers Still Await Relief. Retrieved on 4 January, 2017 from <http://www.tributeindia.com/news/uttarakhand/disaster-afected-almora-v...>
- Kumar, Yogesh. (2016). U`khand has maximum landslide prone areas among north Himalayan states, claims min of earth sciences report, Dehradun, The Times of India
- Maikhuri. R.K., Dhayni P.P. and Nautiyal Annpurna (2015). Meeting Report on Reconstruction and Rehabilitation of disaster affected landscape of Kedar valley, Uttarakhand, Current Science, Vol.108, No.2,25 January, 2015
- Markuna Rajendra.(November 26, 2013.) Uttarakhand Disaster Hit Families Still Living in Tent, Haldwani, The Pioneer. Retrieved on 25th December, 2017 from <https://www.dailypioneer.com/2013/india/uttarakhand-disaster-hit-families-still-living-in-tents.html>
- Ministry of Rural Development .(2007). National Resettlement and Rehabilitation Policy 2007, New Delhi, Government of India.
- National Disaster Management Authority. (2016). National Disaster Management Plan 2016, New Delhi. Government of India.
- National Disaster Management Authority.(2009). National Policy on Disaster Management 2009, New Delhi, Government of India.
- National Institute of Disaster Management. (2000). NIDM. Uttarakhand. National Disaster Risk Reduction Portal. New Delhi. Government of India. Retrieved on January 15, 2017 from nidm.gov.in/PDF/DP/UTTARA.PDF
- Prashant, Shishir (2013): Uttarakhand identifies 239 villages for rehabilitation. The Business Standard. Retrieved on July 3, 2014 from http://www.business-standard.com/article/current-affairs/uttarakhand-identifies-239-villages-for-rehabilitation-113071000618_1.html
- Ravindra K Pande, Rajnish Pande, (2007). Resettlement and Rehabilitation Issues in Uttaranchal (India) with reference to natural disasters, Disaster Prevention and Management: An International Journal, Vol. 16 Issues: 3, pp.361-369. Retrieved on July 3, 2014 from <https://doi.org/10.1108/09653560710758314>
- Retrieved on Febuary 7, 2015 from <https://www.amarujala.com/uttarakhand/almora/disaster-affected-316-families-waiting -to-displacement>
- Retrieved on January 13, 2017 from <https://timesofindia.indiatimes.com/city/dehradun/Ukhand-has-maximum-landslide-prone-areas-among-north-Himalayan-states-claims-min-of-earth-sciences-report/articleshowprint/53512570.cms>
- Sate Disaster Management and Rehabilitation Department (2015). Fund Allocation for Rehabilitation of Disaster Prone 7 Families of Jangni Hamlet of Pharkande Village of Chamoli district. Letter No. 770/XVIII-(2)/2015-(2)/2015-16 (01)/2014 dated 16th March, 2015, Dehradun, Government of

- Uttarakhand.
- Singh, Gyaneshwar (2015): Uttarakhand. A Policy Driven Volcanic State of India (unpublished book)
- State Disaster Management and Rehabilitation Department (2005). Regarding Distribution of Ex-gratia for house construction for Rehabilitation of families of 15 Landslide / Earthquake Affected Villages on the basis of Relocation from Disaster Relief Fund. Letter No. 18/XVIII-(2)/2005, dated 9th March, 2005.
- State Disaster Management and Rehabilitation Department (2005). Regarding Fund Approval for Rehabilitation of Landslide Affected Villages under the Prime Minister Package, Letter No. 654/XVIII-(2)/2005, dated 25th October, 2005.
- State Disaster Management and Rehabilitation Department (2013). Annual Progress Report 2012-13, Dehradun, Government of Uttarakhand
- State Disaster Management and Rehabilitation Department (2013). Annual Progress Report 2012-13, Dehradun, Government of Uttarakhand
- State Disaster Management and Rehabilitation Department (2014). Annual Progress Report 2013-14, Dehradun, Government of Uttarakhand
- State Disaster Management and Rehabilitation Department (2014). The Minutes of the Meeting Chaired by the Chief Minister on dated 13 and 14 February, 2014, Letter Number 14 / 14 February, 2014, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department (2015). Notes for Cabinet on Rehabilitation of Disaster Vulnerable Families, File No. 16 (01)/ 2007 T.C. dated 29th July, 2015, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department (2015). Annual Progress Report 2014-15, Dehradun, Government of Uttarakhand
- State Disaster Management and Rehabilitation Department (2015). Regarding Classification of State's Natural Disaster Vulnerable Villages for Rehabilitation, Letter No. 121/XVIII-(2)/2015-16(01)/2007T.C. dated 24th August, 2015, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department (2017). Annual Progress Report 2016-17, Dehradun, Government of Uttarakhand
- State Disaster Management and Rehabilitation Department (2019). Updated List of Undertaken Resettlement and Rehabilitation in Uttarakhand, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department (undated). Owner Driven Construction of Houses-At a Glance, Uttarakhand Disaster Recovery Project, Dehradun, Government of Uttarakhand. Source: PIU Resilient Housing and Public Buildings <http://ukdisasterrecovery.in/index.php/projects/udrp1/hpb>
- State Disaster Management and Rehabilitation Department (undated). List of 73 Extremely Disaster Vulnerable Villages for Rehabilitation in Uttarakhand, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department, (2017). Increase of Provisioned Amount of Rs. 3 Lakh for House Construction for Rehabilitation of natural Disaster Prone Villages and Families in State, Letter No. 141/XVIII-(2)/2017/16(1)/Rehabilitation Policy/ 2007 dated 9th November, 2017, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department, (undated). Memorandum for Central Assistance to the Central Government, Dehradun, Government of Uttarakhand.

- State Disaster Management and Rehabilitation Department,(2011). Resettlement and Rehabilitation Policy 2011, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (11th May, 2012). Regarding Fund Allocation for Rehabilitation of 4 Affected Families of Chhatikhal village of Rudraprayag, Letter No. 191 /XVIII (2)/F/12-16 (1)/ 2012 dated 11th May, 2012, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (2010). Annual Plan 2010-11, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (2011). Annual Plan 2011-12, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (2013). Annual Progress Report 2012-13, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (2017). Fund Allocation for Rehabilitation of 26 Families of Bhelunta Chherdanu of Tihri Garhwal District, Latter No. 164/XVIII (2)/2017/2(6)/ Tihri/ 2017 dated 27th December, 2017.
- State Disaster Management and Rehabilitation Department. (28th March, 2018). Regarding Fund Allocation for Rehabilitation of disaster affected 7 families of Chhapali Village in Chamoli district, Letter No. 44 / XVIII (2)/2018/2 (12)/ Chamoli/ 2017 dated 28th March, 2018, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (28th March, 2018). Regarding Fund Allocation for Rehabilitation of 56 Affected Families of Semitalli, Kunajethi, Kaviltha, Jaaltalla and Panjana villages of Rudraprayag, Letter No. 42 /XVIII (2)/2017/ 2 (4) Rudraprayag / 2017 dated 28th March, 2018, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (2nd November, 2017). Regarding Fund Allocation for Rehabilitation of disaster affected 60 families of Seemar, Faki and Lodgh hamlets of Kanol in Chamoli district, Letter No. /XVIII (2)/2017/2(5)/ Chamoli/ 2017 dated 2nd November, 2017, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (30th July, 2016). Regarding Fund Allocation for Rehabilitation of disaster affected 76 families of Kunwari Village in Bageshwar district, Letter No. 97/ XIII (2) /2018/ 3(4)/ 2016 dated 30th July, 2016, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (31st December, 2018). Regarding Fund Allocation for Rehabilitation of disaster affected 38 families of Sarpani Village in Chamoli district, Letter No. 276 /XVIII (2)/2 (23)/ Chamoli/ 2018 dated 31st December, 2018, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (31st July, 2017). Regarding Fund Allocation for Rehabilitation of disaster affected 28 families of Dobad, Badet and Seri Seemar Villages in Bageshwar district, Letter dated 31st July, 2017, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (4th September, 2018). Regarding Fund Allocation for Rehabilitation of disaster affected 20 families of Tyalani Tok Khaluda Village in Tihri Garhwal, Letter No. 112 /XVIII (2)/2018/2 (16)/ Tihri/ 2017 dated 4th September, 2018, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department. (6th August, 2018). Regarding Fund Allocation for Rehabilitation of disaster affected 6 families of Bola Village in Chamoli district, Letter No. 114 / XVIII (2)/2018/2 (14)/ Chamoli/ 2017 dated 6th August, 2018, Dehradun, Government of Uttarakhand.

- State Disaster Management and Rehabilitation Department. (7th May, 2018). Regarding Fund Allocation for Rehabilitation of disaster affected 21 families of Tyula Village in Chamoli district, Letter No. 63/ XVIII (2)/2018/2 (13)/ Chamoli / 2017, dated 7th May, 2018, Dehradun, Government of Uttarakhand.
- State Disaster Management and Rehabilitation Department.(undated). Strategy Paper for Rehabilitation of Disaster Prone Villages in Uttarakhand, Dehradun, Government of Uttarakhand.
- State Disaster Management Authority (2014). State Disaster Management Plan. Dehradun. Government of Uttarakhand.
- State Disaster Management Authority (undated). Uttarakhand at a Glance- Earthquake Zone, Dehradun, State Government of Uttarakhand. Retrieved on 25th December, 2019 from <http://dmmc.uk.gov.in/pages/display/95-earthquake-zone>
- State Disaster Management Authority (undated). Uttarakhand at a Glance- Landslide Zone, Dehradun, State Government of Uttarakhand. Retrieved on 25th December, 2019 from <http://dmmc.uk.gov.in/pages/display/96-landslide-zone>
- State Emergency Operation Centre (2013). Summary of Losses due to June, 2013, Dehradun, Government of Uttarakhand
- State Planning Commission .(2008). Annual Plan 2008-09, Dehradun, Government of Uttarakhand.
- State Planning Commission .(2009). Annual Plan 2009-10, Dehradun, Government of Uttarakhand.
- State Planning Commission .(2010). Annual Plan 2010-11, Dehradun, Government of Uttarakhand.
- State Planning Commission .(2012). Annual Plan 2012-13, Dehradun, Government of Uttarakhand.
- State Planning Commission. (2014). Annual Plan 2014-15, Dehradun, Government of Uttarakhand.
- State Planning Department (2012). Annual Plan 2012-13, Dehradun, Government of Uttarakhand
- Tribune News Service (2016): CM seeks Central assistance for rehab of disaster-vulnerable villages. Retrieved on April 15, 2017 from <http://www.tribuneindia.com/news/uttarakhand/cm-seeks-central-assistance-for-rehab-of-disaster-vulnerable-villages/266942.html>
- Word Bank, Asian Development Bank and Government of Uttarakhand (2013). India Uttarakhand Disaster, June 2013, Joint Rapid Damage and Need Assessment Report.