

a. Harda District Disaster Plan:

History: In harda district, mixed form of malwa nimady (nimari) culture is observed. Old customs, practices and tradition are visible in harda with the modern culture. The soil of harda gives the productivity and prosperity. Gonda and korku tribes live in south area of harda.⁴

The Narmada River in harda covers 40km area. Heavy rainfall and opening of the bargi, barana and tawa dams create the condition for flood. No history of district related to earthquake, but harda district comes under the seismic zone III, so risk of earthquake is always present here. Condition of severe drought was made in harda one time between the years 2000 to 2007.⁴

Based on the above facts, the Unisafe and MP government have given the responsibility to disaster management institute Bhopal to prepare a disaster management plan for harda district. The main objective of this plan is to propose a comprehensive disaster management system in harda with the help of innovative technology and by re-examining the old methods of disaster mitigation and management.⁴

Importance of planning:

Disaster is a sudden and uncertain challenge to every human, if preventing disaster is not possible, then at least the plan to reduce effects of disaster is crucial and important through predetermined preparedness and other measures!⁴

- ✓ **Disaster management act 2005:** according to disaster management act 2005, it is important that own disaster management plan is made ready and developed in every district of all states in Indian subcontinent.
- ✓ **Development and disaster mitigation:** Today it is important that the mitigation also includes in the concept of development. How to safeguard from the effects of various disaster with the development of education and health, is the part of healthy development.⁴

Object of District Disaster Management Plan:

1. Disaster management work plan for the effective response in any disaster in district
2. Effective preparedness on the level of district/ tehsil/ block/ village for safe from disaster
3. Select the hazardous/ sensible area in the district for the purpose to minimize the losses at the time of disaster
4. Get the information about the subject of facilities available to the various department which working at the time of disaster in district
5. Important efforts to minimize and relief in effects of disaster
6. Get the important information/ training by the officer of district for effective response
7. Specific area disaster mitigation through using various stages of disaster mitigation
8. Make the fundamental structure for securing/ listing the works, experience and suggestion at the time of disasters
9. Create and present the important plans for disaster mitigation/minimization

3.Source: <http://www.harda.nic.in>, 4. Harda District Disaster Plan

Communication Resource

Block	Khidakiya	Harda	Timarni	Total
Post, Telegraph, telephone	292	280	255	827
Post Office	24	24	23	71
Telephone connection	526	834	741	2101
Bus Service (station)	21	40	22	83
Railway Service (station)	1	2	3	6

5. Census: 2001

Contact Resource

Block	Khidakiya	Harda	Timarni	Total
Pakki Road (constructed)	36	49	35	120
Kacchi Road (not constructed)	139	132	126	397
Footpath	9	9	5	23
River Path	1	0	0	1

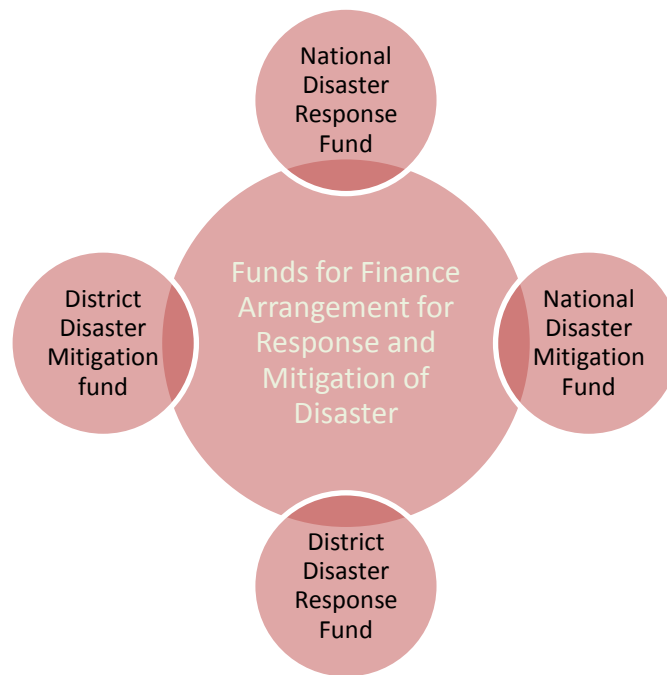
5. Census: 2001

Finance arrangement:

State Disaster Management Authority and District Disaster Management Authority arrange the finance for response and mitigation of disaster immediately after the produce act similar as Disaster management act 2005. The finance arrangement will be through following fund:

- ✓ National Disaster Response Fund
- ✓ National Disaster Mitigation Fund
- ✓ District Disaster Response Fund
- ✓ District Disaster Mitigation Fund

Source:3,4



Emergency Operation Center:

- ✓ EOC is establishing in harda district
- ✓ It provide service 24 hors in every day
- ✓ Available tools in EOC are only use for disaster management
- ✓ The EOC leas from the newly tools and human power
- ✓ Contact resource are also available like (phone, E-mail, wireless etc.)

Source:3,4

Important preparation for disaster management, mitigation in harda district:

Preparation of prior disaster means that takes decision and work before the any event of disaster. It includes the prior information of disaster, prevention and mitigation.

- ✓ Increase the effects and capability of response system on the state and community level.
- ✓ Training of officer/worker who participating in response work
- ✓ Alert, dynamic and trained to the person who living in hazard prone area
- ✓ Give the training to the response team for effective response

Source:3,4

b. Disaster Mitigation Work Plan:

- ✓ **Formative mitigation**
- ✓ **Non-formative mitigation**

Formative mitigation means that making any structure to keep in mind the hazard/sensitivity of specific area.

Non-formative mitigation means that aware the people through debate, camping, competition etc.

Mitigation for Drought:

- ✓ Collection of rain water
- ✓ Planting tree
- ✓ Rain water harvesting
- ✓ Training to farmer on the subject related to crop which is based on low/minimum raining
- ✓ Important construction for improving the earth water level like stop dam, check dam
- ✓ Construction of ponds and wells^{3,4}

Mitigation for Flood:

- ✓ Mark the flood effected area in villages
- ✓ For security purpose develop the wall and banks on that place where the flood water entered firstly
- ✓ Prepare the check dam, stop dam and reserve weir in flood effected area and villages
- ✓ Establishing the information body for communication between the officers of important dam presented in the district
- ✓ According to importance diverted the direction of water of flood from the flood effected area/place/villages
- ✓ Prepare the important work plan for making effected to flood prior information body
- ✓ Force the plan of collection of rain water from effected method

Mitigation for earthquake:

- ✓ Marking and reconstruction of old buildings
- ✓ Earth-utilization plan
- ✓ Training and laboratory
- ✓ Public awareness^{3,4}

Mitigation for Drought	Mitigation for Flood	Mitigation for Earthquake
<ul style="list-style-type: none">• Collection of Rain Water• Plantation• Rain Water Harvesting• Construction of Ponds, Wells & Dams	<ul style="list-style-type: none">• Mark the Effected Area• Construction of dams• Divert the direction of rain water	<ul style="list-style-type: none">• Reconstruction of old Buildings• Public Awareness• Earth-Utilization Plan

Mitigation for Road Accident:

- ✓ Construction of two lane roads
- ✓ Increase the width of road according to past marked accidental place
- ✓ Erect hoardings and other forms of signage at selective places

- ✓ Marking on Road
- ✓ Construction and repairing of bridge and side recalling
- ✓ Mobile vans for quick healthcare
- ✓ Construction of rumble strep for minimize the speed of vehicles
- ✓ Regular patrolling on highway
- ✓ Established the picate on main place of accident
- ✓ Organize the mobile medical team
- ✓ Strictly follow the rules related to seat belt and helmet and motivate those person who follow the rule

3. Source: <http://www.harda.nic.in>, 4. Harda District Disaster Plan

c. Water Resources in Districts

Block	Khidakiya	Harda	Timarni	Total
Drinking water facility	178	175	161	514
Water tap	12	5	7	24
Wells	155	157	149	461
Tanks	2	6	2	10
Tub Well	35	33	12	80
Hand pump	159	166	144	469
River	65	62	52	179
Canal	7	20	12	39

Reference: Census 2001