

FLOOD

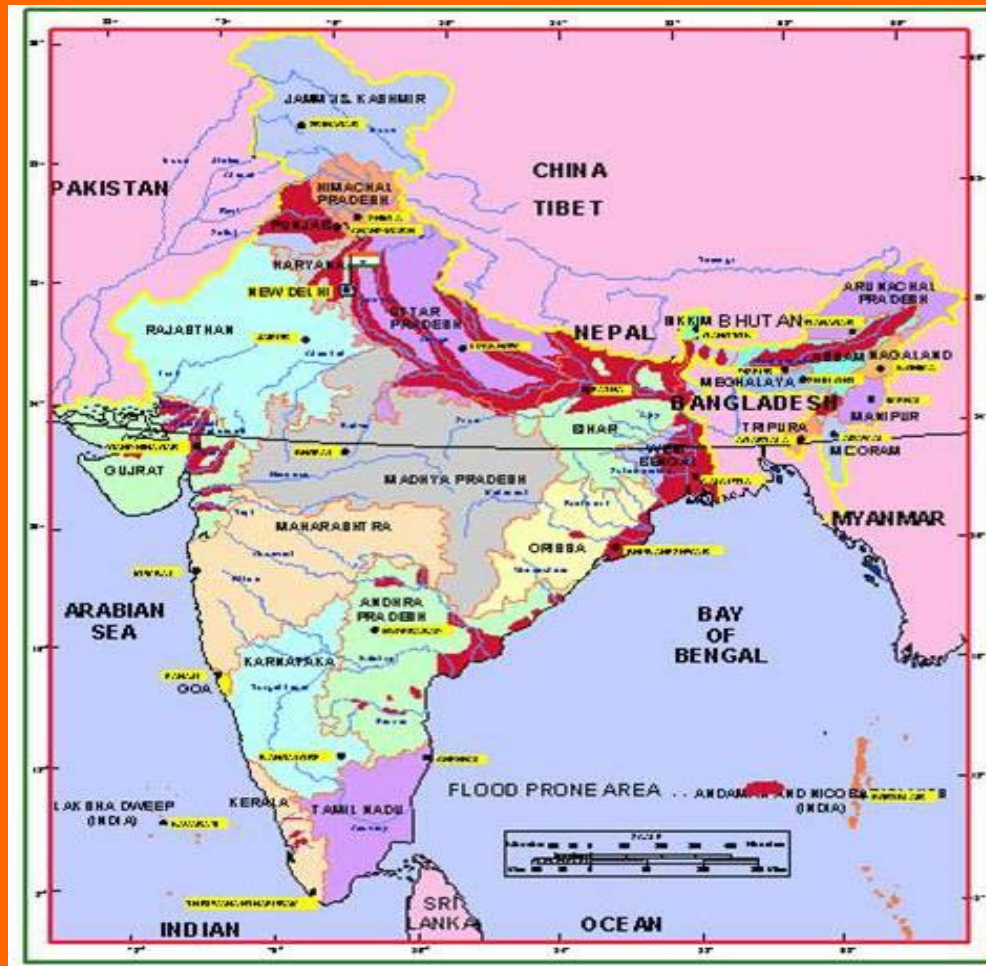
FLOOD IS THE MOST FREQUENT NATURAL DISASTER TO WHICH THE COUNTRY IS EXPOSED TO.

DIFFERENT PARTS OF THE COUNTRY EXPERIENCE FLOOD OF VARYING MAGNITUDE ALMOST EVERY YEAR

AREA(M.Ha.)

GEOGRAPHICAL	329	
FLOOD PRONE	40	12%
PROTECTABLE	32	80%
PROTECTED (Upto 3/2000)	15.8	49%
FLOOD AFFECTED		
– AVERAGE	7.6	
– MAXIMUM	17.5	(1978)
– MINIMUM	1.5	(1965)

FLOOD PRONE AREAS IN INDIA



AVERAGE ANNUAL FLOOD DAMAGE (1953-2000)

- **TOTAL DAMAGE** : **Rs.13,500 million**
- **AREA AFFECTED** : **7.57 million hectare**
- **CROP AREA AFFECTED** : **3.55 million hectare**
- **HUMAN LIVES LOST** : **1595 Nos.**
- **CATTLE LOST** : **94,700 Nos.**

RIVER BANK EROSION







FLOOD MANAGEMENT

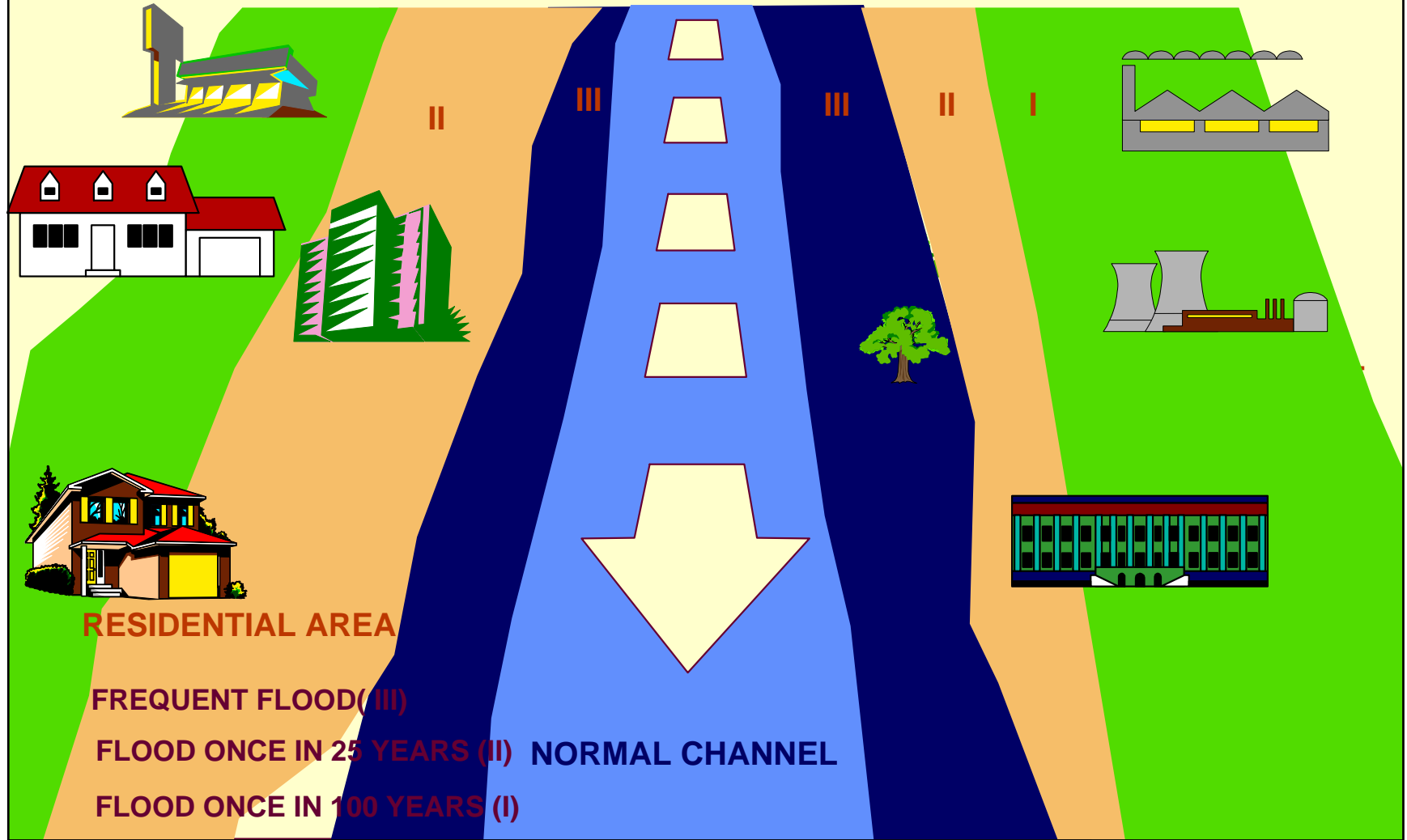
- **STRUCTURAL MEASURES**
 - **PHYSICAL WORKS FOR MODIFYING FLOOD MAGNITUDE**
 - **DAMS & RESERVOIRS**
 - **EMBANKMENT**
 - **CHANNEL IMPROVEMENT**
 - **RIVER DIVERSION (In a very limited way)**
 - **INTER BASIN TRANSFER(Planning Stage)**
 - **ANTI EROSION WORKS**

FLOOD MANAGEMENT

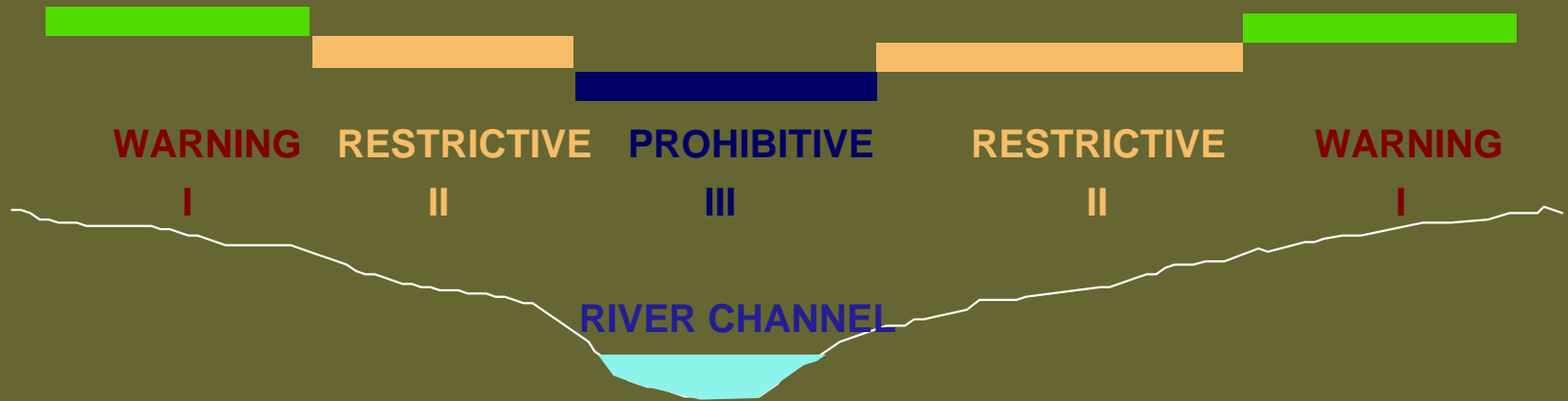
NON-STRUCTURAL : PLANNED ACTIVITY TO MODIFY MEASURES SUSCEPTIBILITY TO FLOOD DAMAGE

- FLOOD FORECASTING & WARNING**
- FLOOD PLAIN ZONING**
- FLOOD FIGHTING**
- FLOOD PROOFING**
- FLOOD INSURANCE(In very limited extent)**
- RELIEF & REHABILITATION**

FLOOD PLAIN MANAGEMENT & ZONING

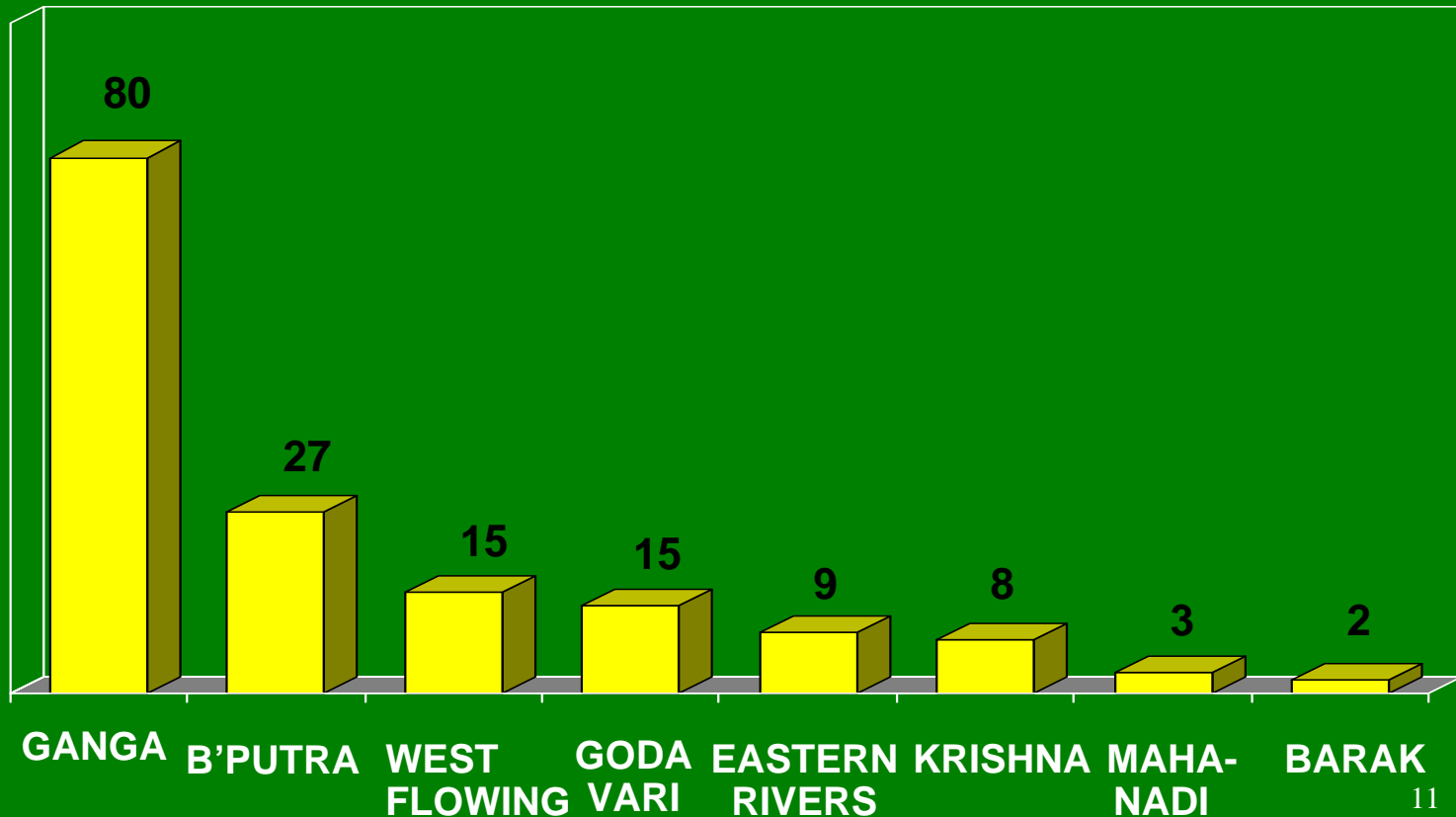


FLOOD PLAIN MANAGEMENT & ZONING



INDIA

FLOOD FORECASTING STATIONS



STRATEGY FOR FLOOD MITIGATION

- **BASIN-WISE INTEGRATED WATER RESOURCES MANAGEMENT APPROACH.**
- **ENFORCING FOR SPECIFIC FLOOD SPACE IN RESERVOIR.**
- **MINIMIZATION OF ILL EFFECTS CREATED BY EMBANKMENT.**
- **SCIENTIFIC APPROACH WITH PROPER PLANNING FOR ANTI EROSION WORKS.**
- **DRAINAGE IMPROVEMENT.**
- **SOIL CONSERVATION MEASURES.**
- **FLOOD FORECASTING AND WARNING MEASURES.**
- **PEOPLES PARTICIPATION.**

THANK YOU

