Season -4

Sponsored Thesis Project Competition on

"Re-imagining Urban Rivers"

Assessing Socio-Spatial Impacts of Dam Operation on Downstream Areas: A Case of Omkareshwar Dam

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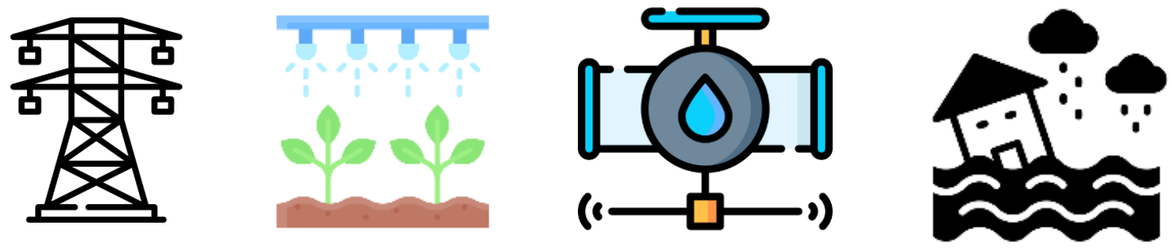
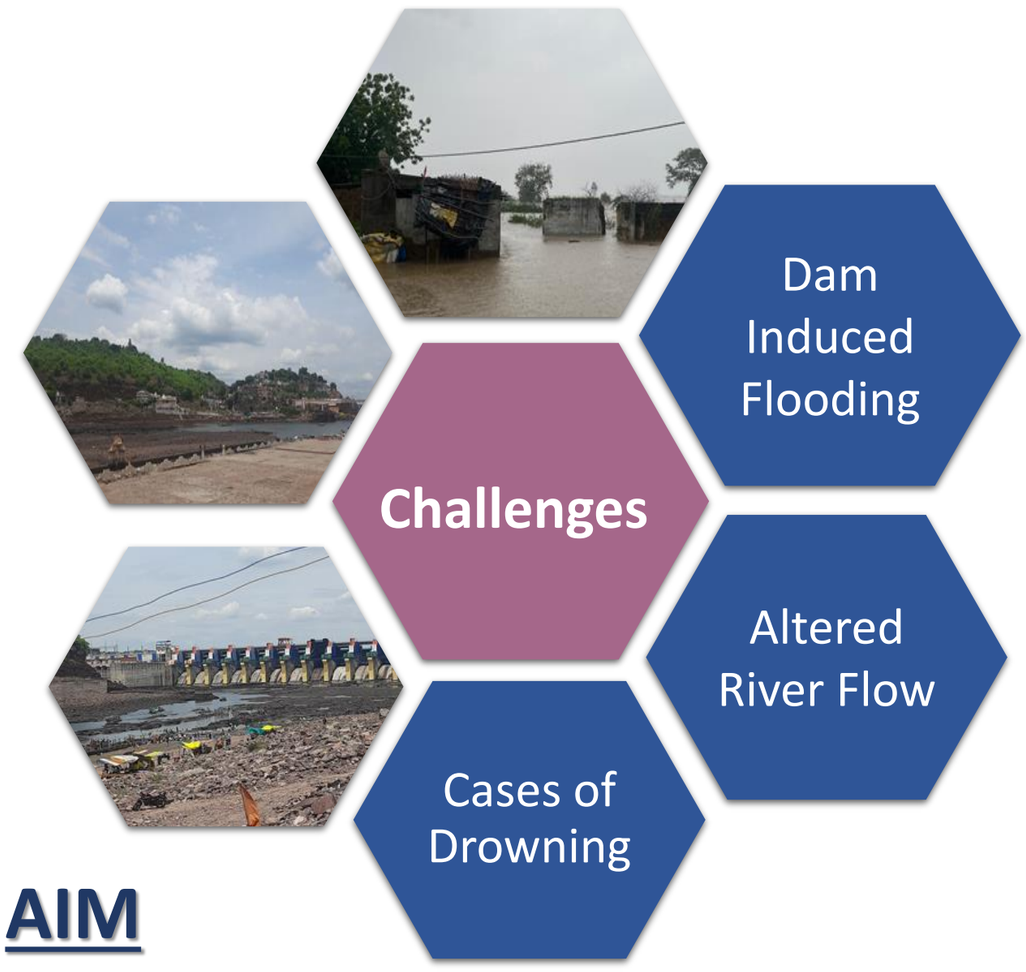
Course Discipline: B. Planning

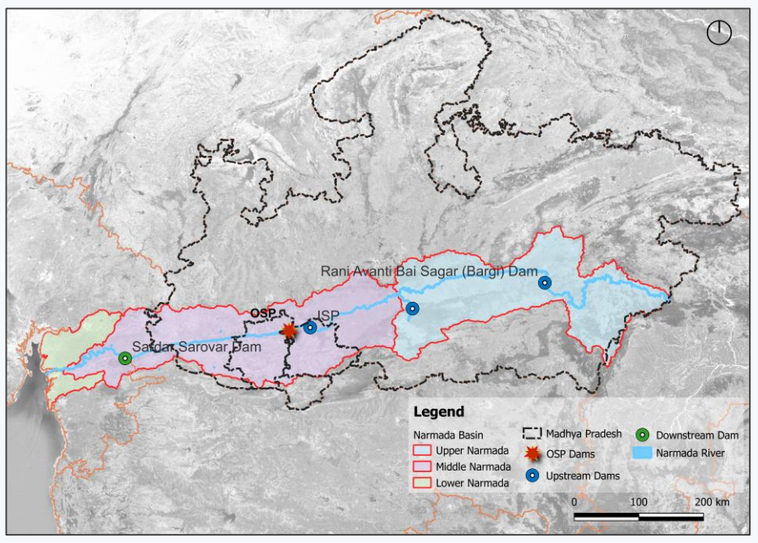
Functions of Multi-Purpose Dam

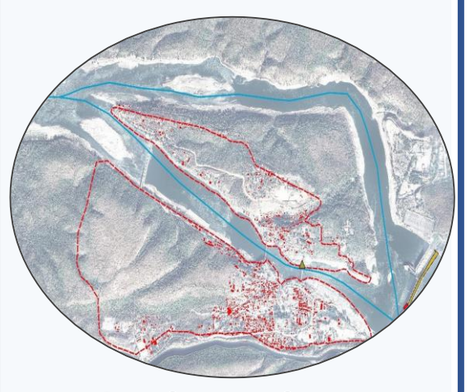


Energy Generation | Irrigation | Water Supply | Flood Control



Study Area

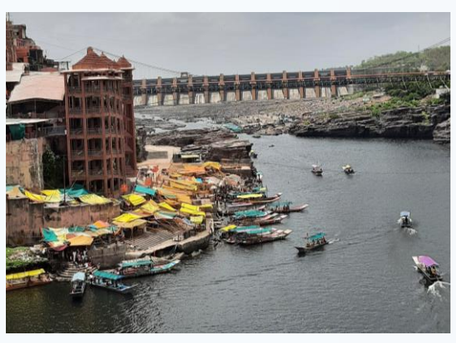




Omkareshwar

Fig.: Narmada Basin & Major Dams

Location:
State - M.P.
District - Khandwa
Population: 35000



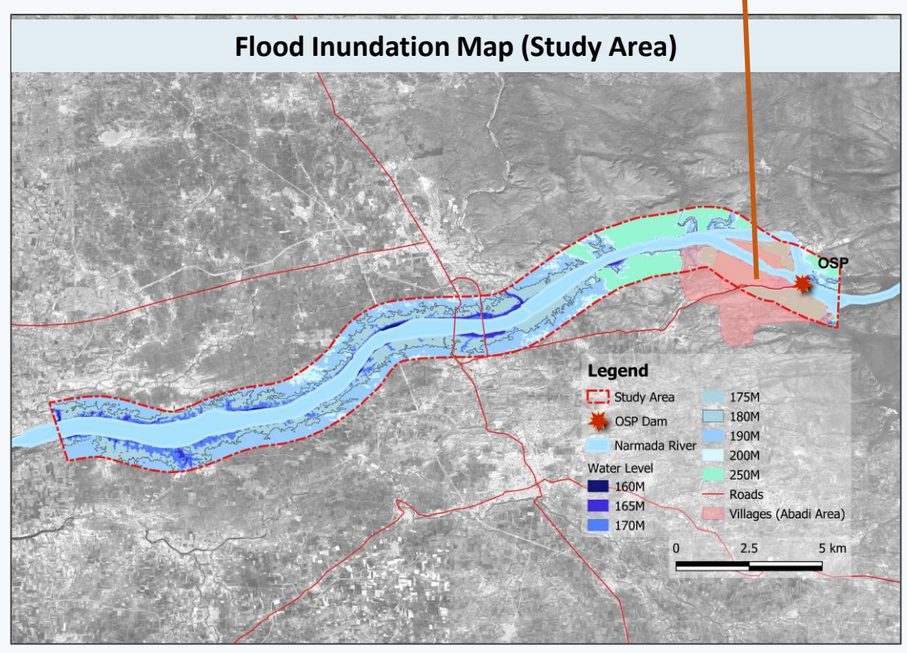


Fig.: Multipurpose Dam on the edge of major pilgrimage town

AIM

To provide mitigation measures for the negative impacts of dam operations in downstream areas

1. To study river dam and rainfall pattern.
2. To understand zoning regulation and landuse at the downstream areas of Omkareshwar Dam.
3. Assess socio-spatial impacts on Downstream areas
4. Develop tailored solutions addressing social, spatial & rainfall-related challenges in downstream dam operations

- No flood management regulations in Omkareshwar & villages in the downstream.

Issues

- Damage to Boats
- Affects fish quantity
- Flooding in houses & shops
- Flooding in Farms
- Risk to tourists' life

PROPOSAL/STRATEGIES

1. Maintaining Environmental flow in river
2. Mass Alert System
3. Crop Diversification
4. Regulation of Dam Water Discharge
5. Installation of Warning Signage
6. Relocation of Vulnerable Communities.
7. Strict Implementation of NGT Guidelines
8. Deployment of Floating Barriers.