The Iranian New Criteria for Selection of Design Floods
Risk for the downstream

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<th>S1</th>
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<th>S6</th>
<th>S7</th>
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<97 % of Risk would be from Q<Q1000
B/C of PMF spillway

- Dam Cost = $100 m (medium dam)
- Spillway extra Cost for PMF = $10 m
- Total Downstream Damage should be:

$100 B

for B/C=1 for accommodating PMF
So for nearly all spillways B/C<<1

Socially Acceptable Risk (SAR)

Strength of a chain

= Strength of the weakest link
Socially Acceptable Risk (SAR)

- European Criteria: 
  (DF=Q1000 ,SCF=5000-10000 )

- U.S. Criteria: 
  (DF=PMF (Incremental damage Evaluation))

- Japanese Criteria

- (DF=Q200 for Concrete and DF=1.2Q200 for earthfill and rockfill dams)
The Iranian New Criteria for Selection of Design Floods

Enhanced Safety

Risk

10^-3  10^-4  10^-5  10^-6

Probability of a Disastrous Failure of Dam