

Making choices:
How to balance investments
to reduce flood risk
(Project Appraisal)

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Introduction to appraisal : Why do we do appraisal?



Understanding the problem and baseline: How do we do this?



Objectives: What are we trying to achieve?



Developing options: What and where is change required and desirable?



Cost & benefit : How do we value costs, the benefits and the impacts?



Options comparison : How do we make a balanced choice?



Business case : Pulling the whole story together.

Fundamental Philosophy

Understanding the choices

government policy



legal requirements

impacts on people the economy the environment



choice



benefits



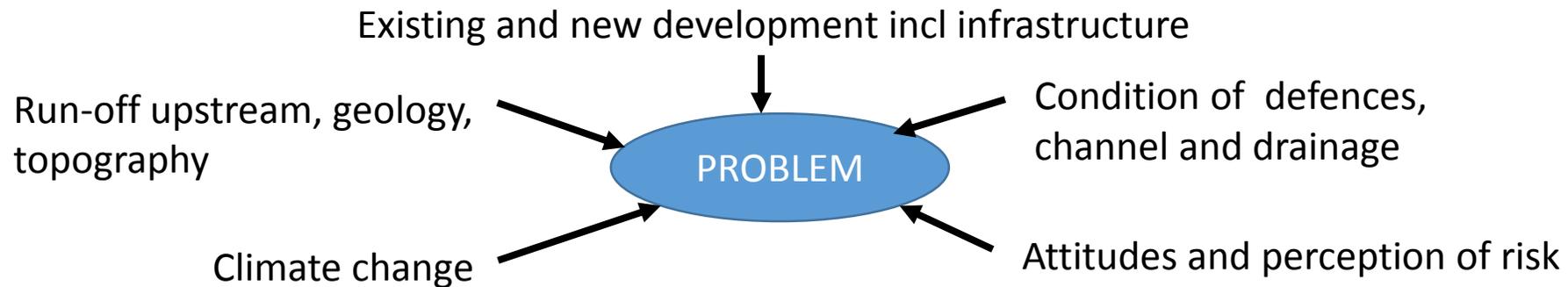
costs

- To deliver
- Negative impacts
- damage

Understanding the problem and baseline



- The problem is why the project is needed
- helps to identify what is causing the problem
 - then you can work towards the solution.



Most problems are a combination – unpick to understand how much each factor contributes and how they combine.



Poor appreciation of the problem risks wasting time, money and effort.

Objectives



Appraisal is an objective-led process



Give focus on measurable outcomes



Benchmark that solutions are on track to meet objectives



Reference for decision making

Project without objectives – like a bus without a destination

Who needs to be involved?

- Community focussed
- Collaborative working

Wider the interest group – increase potential for richer and broader set of objectives



Developing options

-systematic process of identifying and choosing the best option to deliver a set of objectives to identified problem.

Strengthening defences

- walls
- embankments
- channel modification
- weirs/bridges



Upstream management

- engineered or
- NFM



Options – maybe a combination of

Water level management

- Pumps and weirs



Community resilience

- Property level protection
- emergency plans
- temporary defences



Maintenance

- conveyance
- targeted sediment management
- weed & grass cutting



Costs and benefits

 **Costs:** money spent on implementing an option eg a wall together with future cost of maintenance or operation (- whole life)

 **Benefits:** the advantages that occur if option implemented

- Avoiding negative things eg flood damage or gravel removal
- Positive things like improved water quality

 **Worthwhile:** benefits of doing something are more than the cost of doing it

- Helps us understand why one option is better than another
- Not always easy to monetarise but there are methods available

Options comparison

Aim:- To arrive at a preferred option in a transparent and justifiable manner

- Decisions & reasons can be explained to all those interested in or affected by it

How:- methodical & logical approach

- compares options without any bias towards (or against) any of them
- all stakeholders, including communities, invited to provide evidence

Who makes the decision?

- Important that all stakeholders fully involved in the choice of preferred option
- Someone has to take overall responsibility
 - usually whoever is paying for the option

Thank you for listening
- Any questions?