

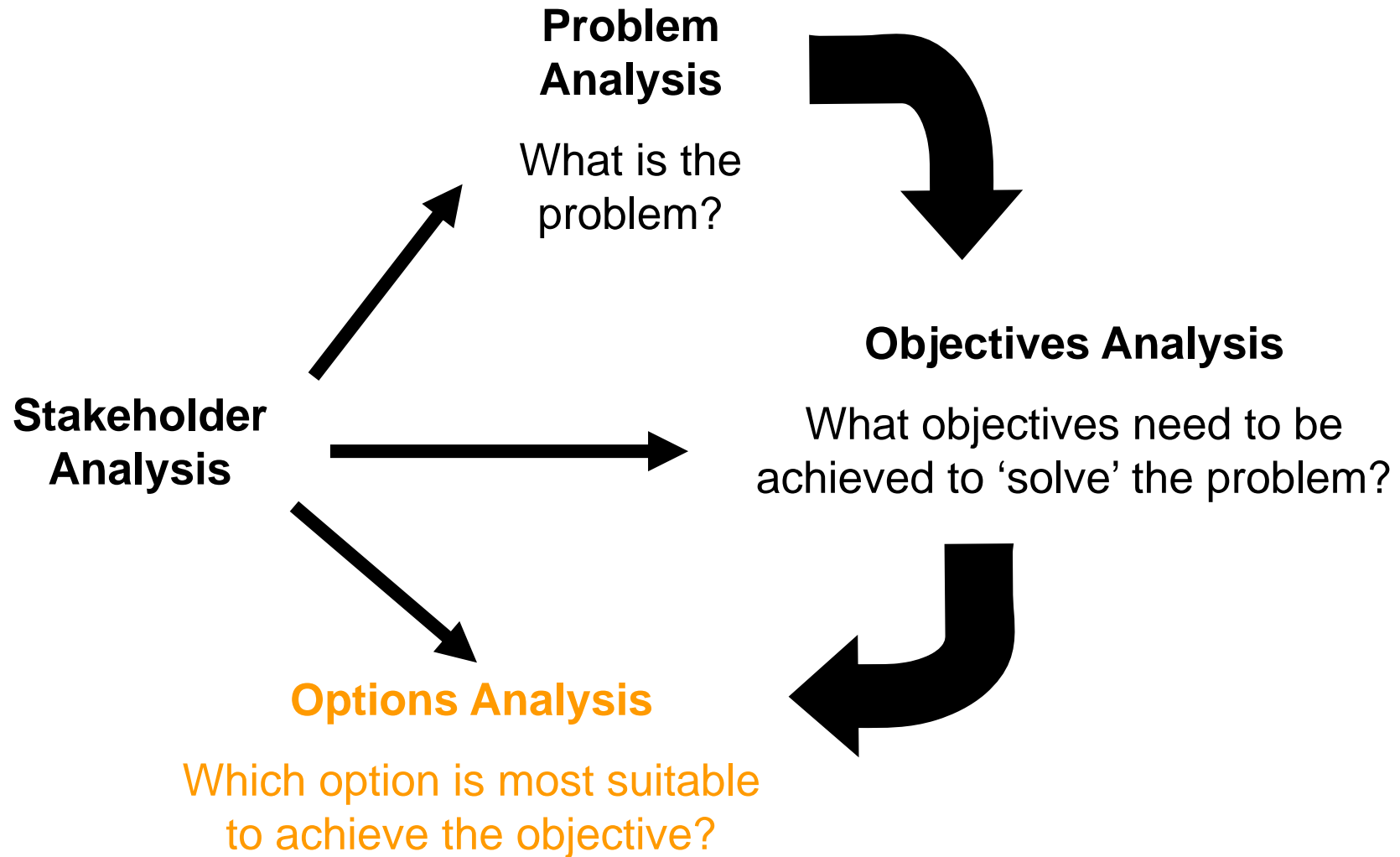


# Objective Oriented Planning

## Part 3 – Options Analysis

Based on UNESCO-IHE & UNEP/GPA Training on Wastewater Management

## The analysis phase of OOP



# Options analysis

## How to achieve the objectives identified?

- Identify alternative options.
- Assess their feasibility.
- Agree upon one project strategy.

=> Discuss alternative options with the stakeholders to come to an agreement.

## Options analysis - criteria

Social	distribution costs/benefits, gender, motivation, local involvement
Health	mortality rates, diseases
Technological	appropriateness, use local resources, market suitability
Economic	economic return, cost effectiveness
Financial	costs, sustainability, foreign exchange needs
Institutional	capacity, capability, technical assistant inputs
Environmental	impacts, environmental costs vs. benefits

## Options analysis - scores

Estimate scores for the selected criteria for the alternative options:

- High-low.
- +/-.
- Extensive/limited.
- Scale 1-5.

## A simple example: buying a car – male perspective

### The situation:

- You are married. You have two children and your wife is expecting her third child.
- On weekdays, on the way to your work, you drop two children at school. You need your car also during your work, mainly for fieldwork (monitoring water quality).
- On Saturdays you are busy with extending your house. Therefore you need your car for transporting large and heavy building materials.
- On Sundays you visit with your family your mother-in-law. She always prepares lunch, but expects to be taken out for a ride.
- You want to buy a new (2<sup>nd</sup> hand) car and have basically three options:
  - BMW sports car
  - Nissan 4x4 pick-up
  - Toyota station wagon

## A simple example: buying a car – male perspective

Below is a scorecard:

- = 0 points; + = 1 point; ++ = 2 points; +++ = 3 points

Criterion	BMW	Nissan	Toyota
Price	-	+	++
Petrol consumption	-	+	++
Status	+++	++	-
Family transport	-	+	++
Building materials	-	++	+
Fieldwork	-	++	-
Maintenance costs	-	-	+
<b>Score</b>	<b>3</b>	<b>9</b>	<b>8</b>

## A simple example: buying a car – male perspective

What did we forget? → stakeholder analysis !!!!

Your wife wants a red car, and she is very influential!

Criterion	BMW yellow	Nissan white	Toyota red
Price	-	+	++
Petrol consumption	-	+	++
Status	+++	++	-
Family transport	-	+	++
Building materials	-	++	+
Fieldwork	-	++	-
Maintenance costs	-	-	+
Colour	-	-	+++
<b>Score</b>	<b>3</b>	<b>9</b>	<b>11</b>

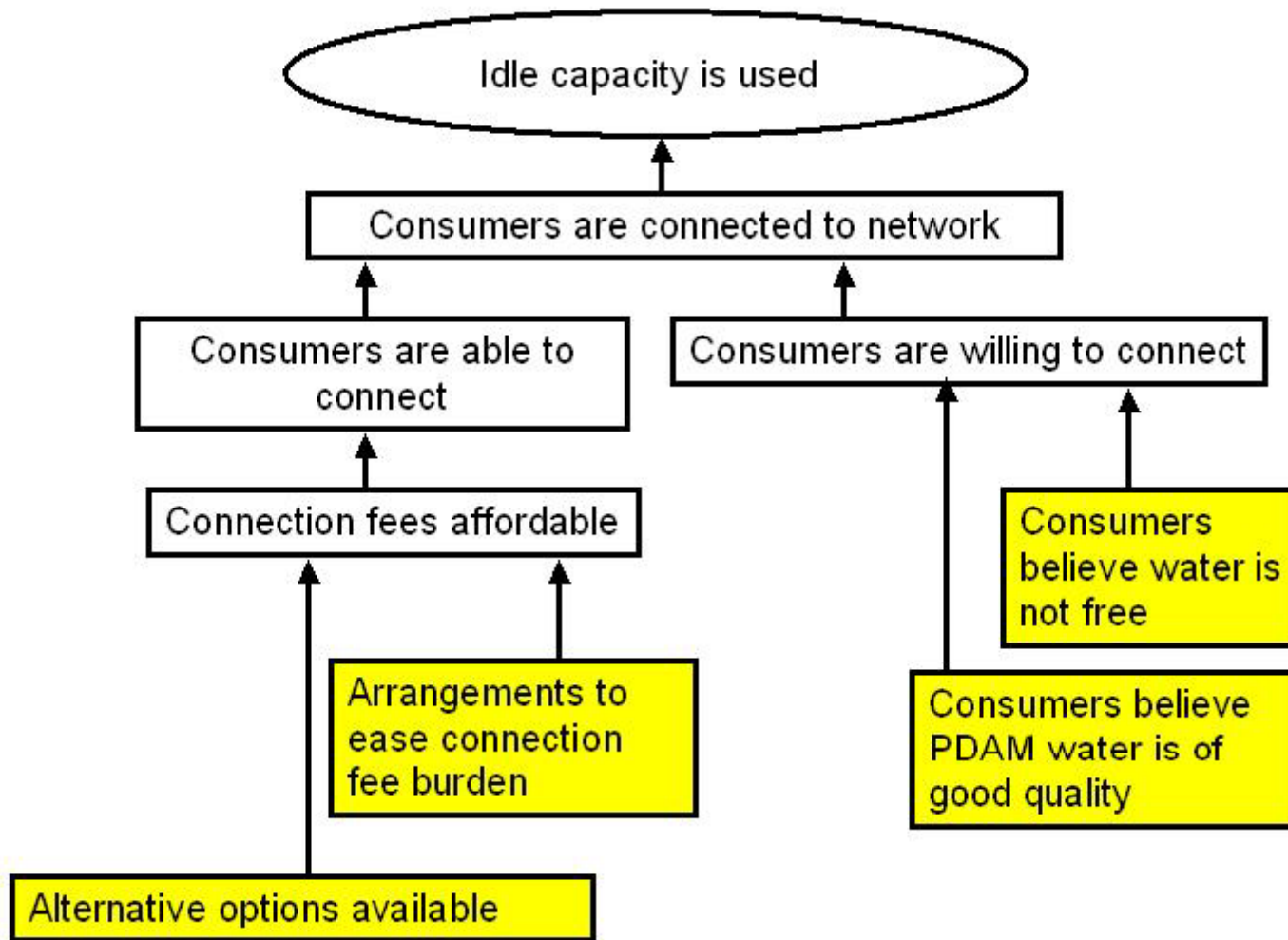


## Options analysis – steps to be taken

1. Identify differing means-ends branches as alternatives.
2. Discuss the implications for affected groups.
3. Assess the feasibility of alternatives.
4. Select one alternative as the project strategy.
5. If no direct agreement, then:
  - introduce alternative criteria, or
  - alter the most promising option by including/subtracting elements from objectives tree.

=> Include stakeholders!

## Lembang – the revised objective tree



## Lembang – option 1 : alternative cheaper technology

- Makes connecting financially attractive for a larger group of consumers.
- If consumers still do not trust the quality of the water provided by PDAM, the chances that they indeed will connect to the network are small.
- Thus, investments in alternative technologies by PDAM will not be returned.

## Lembang – option 2 : easing burden of connection fee

- Connecting to the network will become more attractive for the consumers by offering arrangements which reduce the burden of the connection fee.
- The problem remains that if the consumers do not believe that the water is of good quality, they will still not connect regardless the burden of the connection fee.

## Lembang – option 3 : information/education campaign

- Option 3 will increase the willingness of consumers to connect, as they believe to get high quality water and attractive services.
- For many of them, however, the price for connecting to the network will be too high, and therefore most consumers will depend on alternative, cheaper sources of drinking water, e.g. water from shallow wells, etc.

## Lembang – option 4 : combination of options

- A fourth option, i.e. the combination of options, seems to be more attractive. In this case, either option 1 or 2 is combined with option 3.
- Although the costs will be higher, this option has the highest probability of success as it addresses both the costs of connecting to the network as well as changing the attitudes of the consumers.

## Lembang: options analysis

Selection criteria	1 Alternative technology	2 Reduce connection fee	3 Information/ education campaign	4 Option 1 and 3 combined
Willingness to pay	-	-	+	+
Ability to pay	+	+	-	+
Cost	-	-	+	-
Cost/benefit	-	-	+/-	+
Social risk	+	+	+	+
Sustainability	-	-	-	+
<b>SCORE</b>	<b>2</b>	<b>2</b>	<b>3.5</b>	<b>5</b>