

# Strategies for Brownfield Redevelopment

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# Outline of the Presentation

1. Brief description of terminologies and concepts
2. Case study of redevelopment of Hammarby Sjostad (Stockholm, Sweden)
3. Possible strategies for brownfields redevelopment in Ho Chi Minh City
4. Conclusion

# Terminologies

1. **Brownfield:** US EPA defines it as “abandoned, idled, or under-used industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”
2. **Redevelopment:** Successful redevelopment can turn the site into a precious urban land, which can be used for variety of purposes including industrial and housing
3. **Site assessment:** Technical experts need to assess site contamination and cleanup plan
4. **Tax incentive:** Forgiveness of levy or reduction of taxes owed to encourage private sector participation in redevelopment
5. **Revolving fund:** Making pool of the funds available from various sources to make loans to private sector or to communities for investing in redevelopment
6. **Finality:** Legislation to bring finality to cleanup, especially if new evidence of contamination emerges

# Barriers to Brownfield Reuse

- Developers and investors are cautious about environmental liability and they require guarantees and incentives
- Costly construction delays due to environmental regulations and procedures for contaminated properties
- Tradeoff between urban brownfields and rural greenfields (financial, technical, regulatory, and institutional aspects)
- Cost-benefit analysis for substantial costs on assessment, cleanup, and redevelopment of brownfields, and the benefits from their reuse

# Legislation for Brownfield Reuse

1. Tax incentives: tax credits or tax-exempt financing, which ease cash flow or cost of capital for brownfield projects
2. Direct capital attraction incentives: to grant money to states and cities for investing in cleanup and redevelopment
3. Liability clarifications and process related initiatives: to protect parties like owners, buyers, and adjoining property owners from having to pay for brownfield cleanup and redevelopment



# Capacity for Brownfield Redevelopment

## 1. Assessment of the problem (current or future)

Pollution levels, stakeholders, and the reuse  
(Monitoring → cause and effect analysis)

## 2. Planning and implementation of the response

Identification of the responses (options)



Prioritization of the options (short-term & long-term)



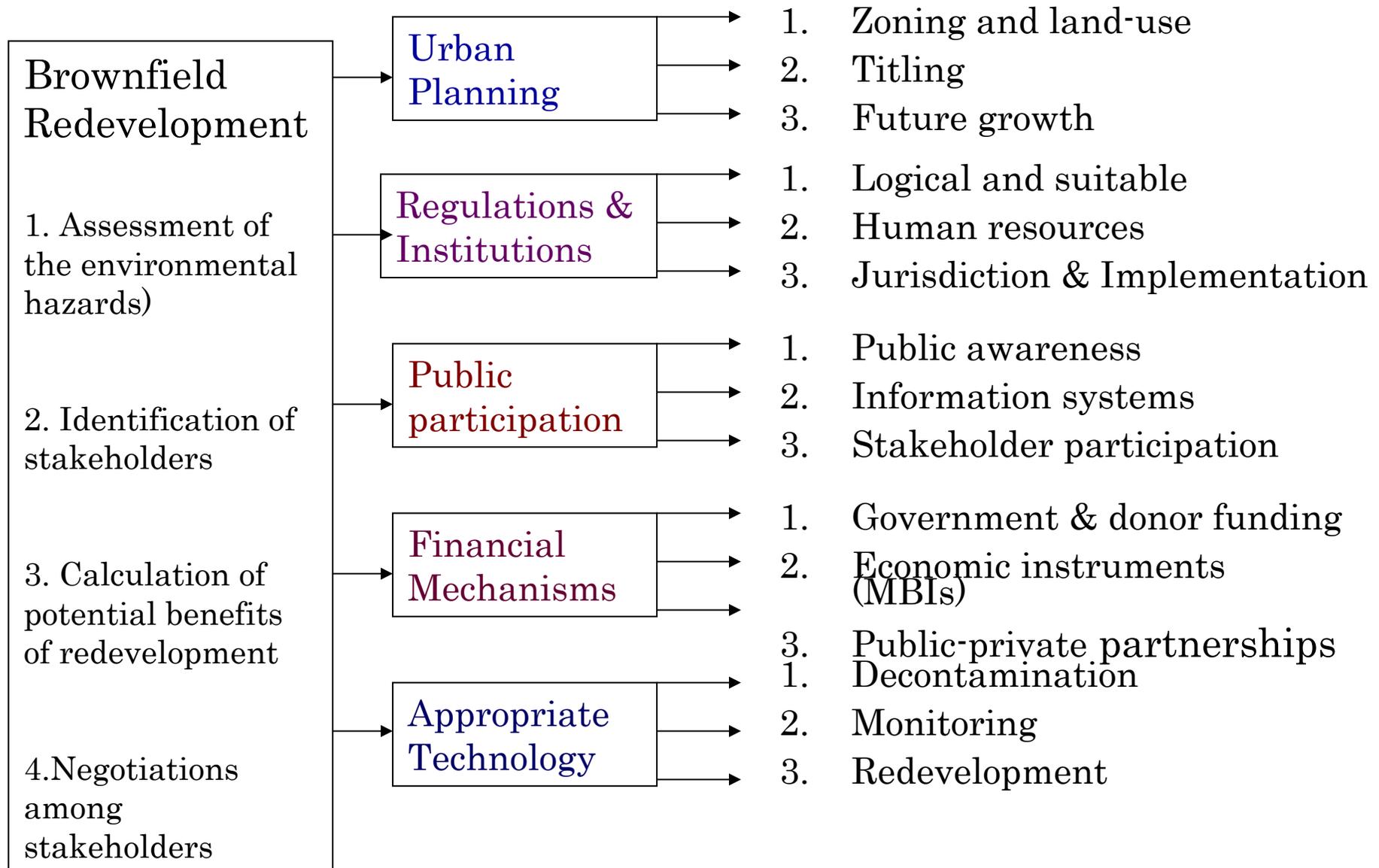
Implementation of the options

# Critical Path Analysis

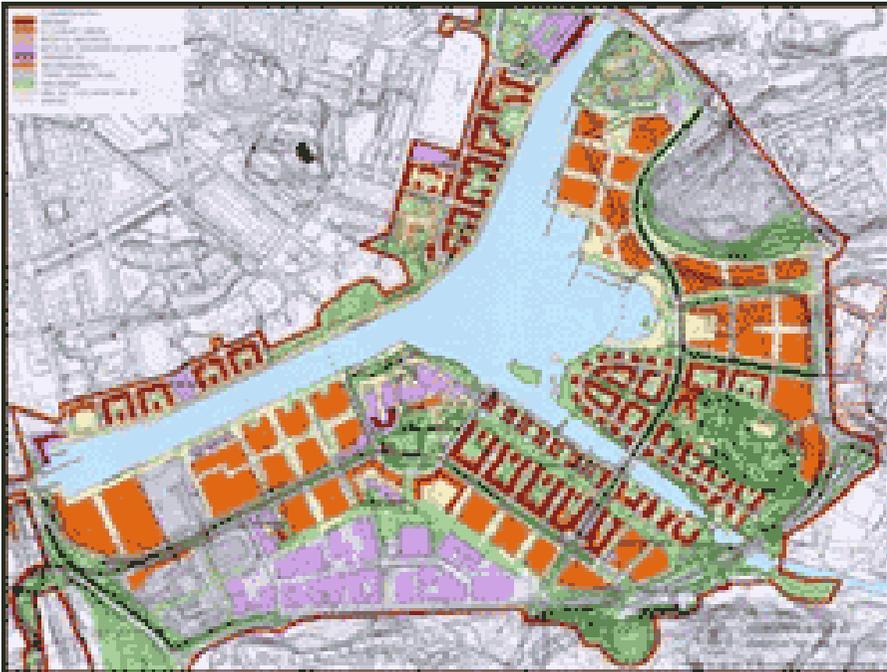
## Challenges

## Necessary condition(s)

## Essential condition(s)



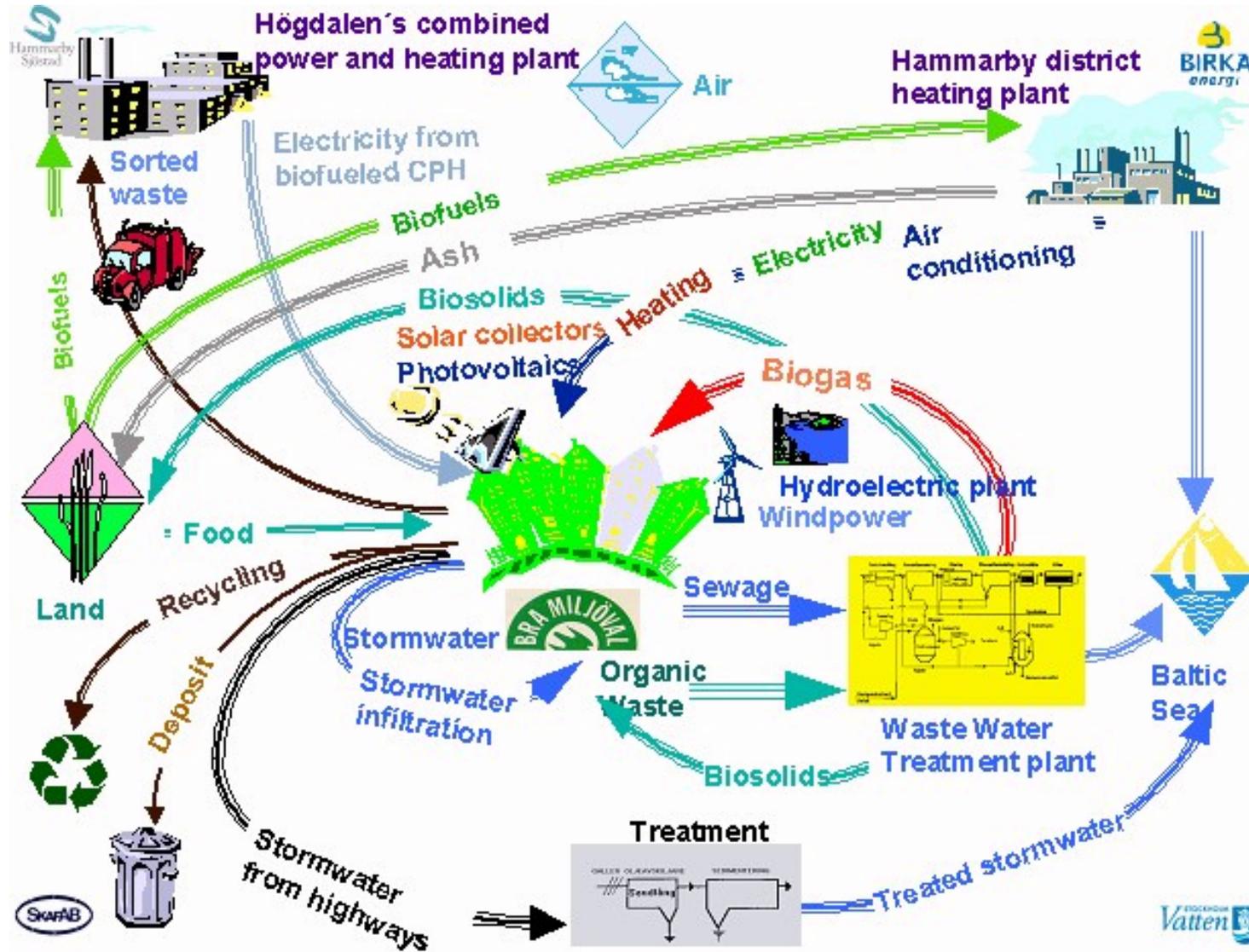
# Hammerbay Sjostad



# Hammerbay Sjostad Details

- Focus on water
- Transforming a rundown industrial dockland into a modern city district
- This is a natural extension of Stockholm's city center with modern design
- Environmental friendly life style
- When fully developed, there will be 8,000 apartments for 20,000 residents and a total of 30,000 people will live and work within that area

# Hammerbay Sjostad Model



# Hammerbay Sjostad Model Details - I

- The natural cycle should be closed at as local a level as possible.
- Consumption of natural resources should be kept to a minimum.
- Total energy consumption should be reduced and energy utilization increased.
- Consumption of clean water should be reduced.
- Sewage is to be utilized for energy extraction, and its nutrient salt content returned to farm soil.
- Building materials are to be renewable or recyclable, and should contain a minimal level of substances detrimental to the environment and public health.
- All land in the area is to be decontaminated to such an extent that residents are not put at risk.
- The lake is to be restored.
- Transport needs are to be reduced.

## Hammerbay Sjostad Model Details - II

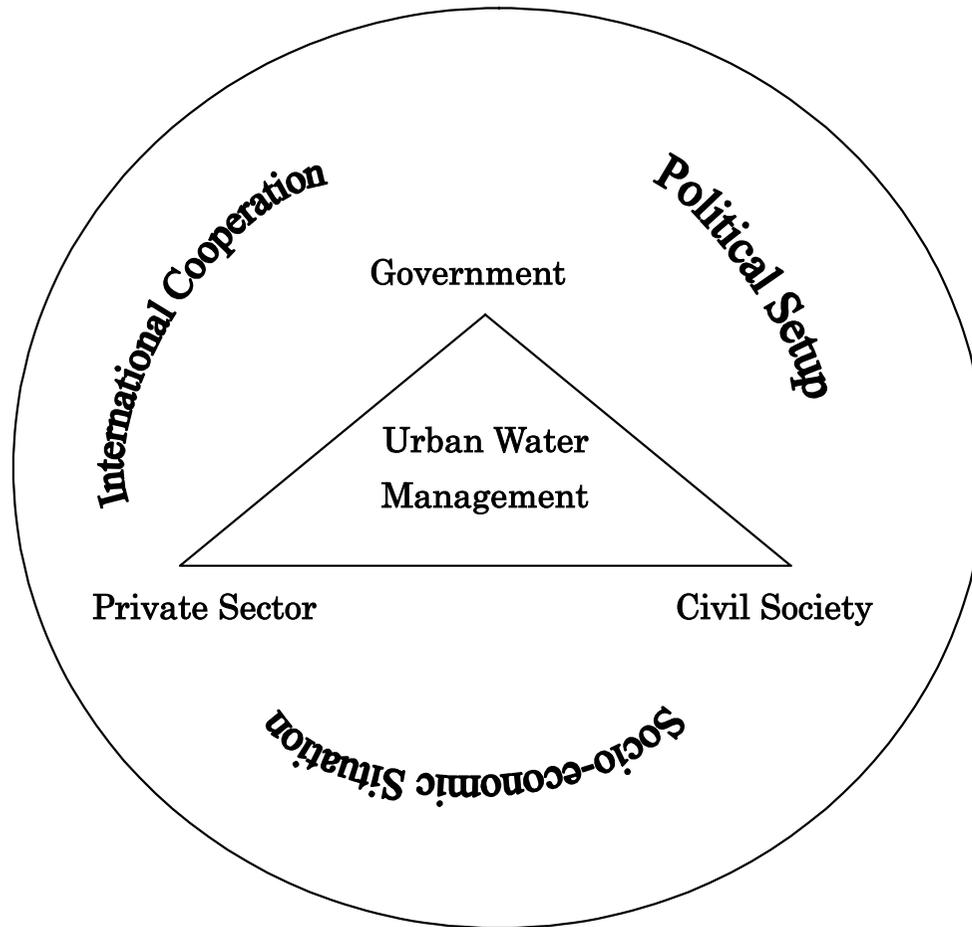
- All solutions are to be adapted to the needs of local residents, and should promote a feeling of community as well as the adoption of ecological responsibility.
- The participation and requirements of the residents should be taken into consideration and allowed to influence the design and development of the district itself.
- Implementation is to be used as a lever for the development of new sustainable solutions for energy consumption, the consumption of natural resources, sealing the natural cycle, e.g., in the case of food, the recycling/reclamation of waste, the minimization of transport needs, etc.
- The solutions and measures used are not to result in increased costs that are so high as to inhibit widespread diffusion of the ideas and principles involved.
- The knowledge, experience and technology generated in the process are to be disseminated in such a way as to contribute towards sustainable development in other areas.

## Brownfield Redevelopment in HCM City

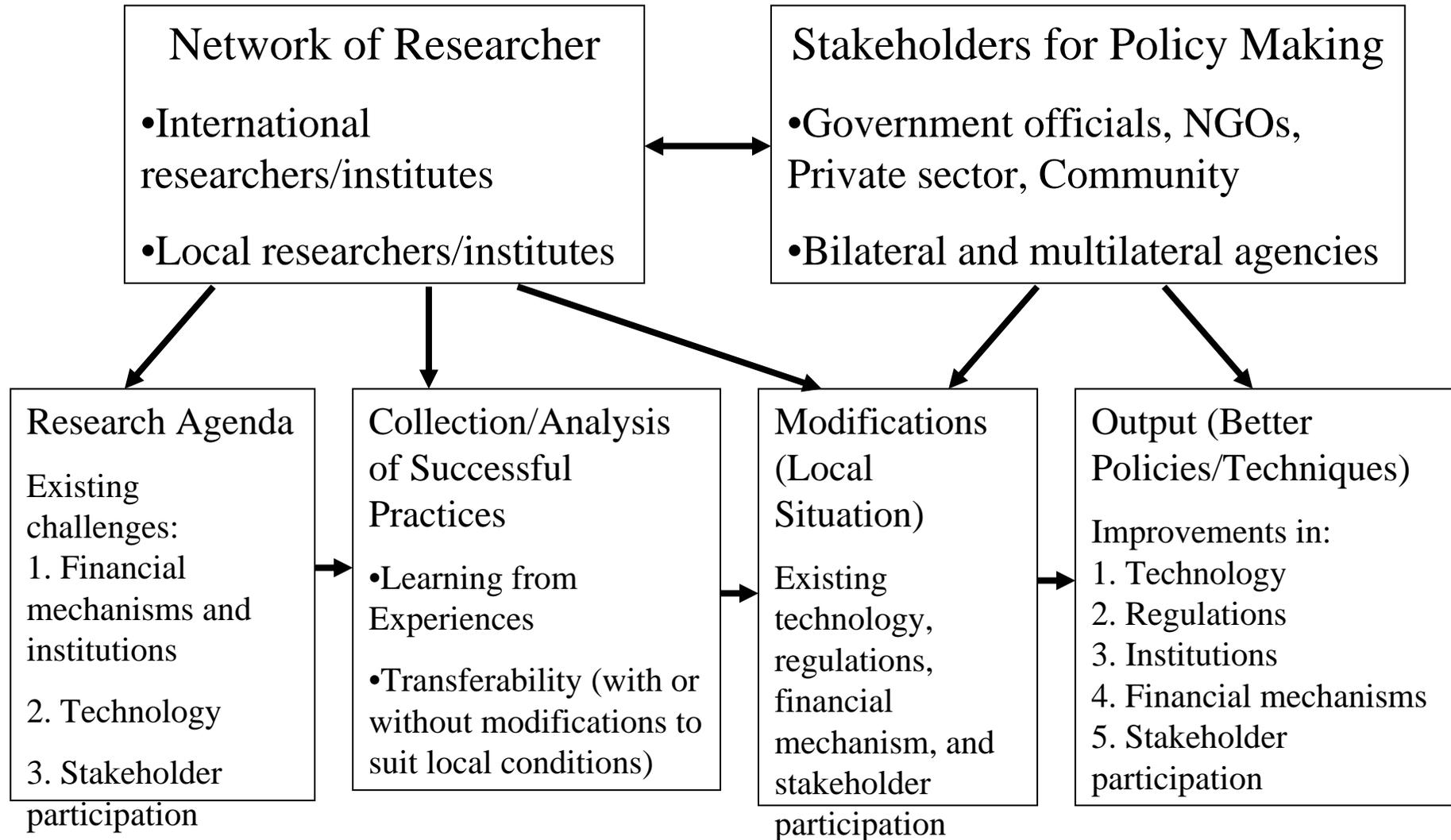
- Focus on water
- Assessment of brownfields and cleanup plans with the assistance of international and local agencies
- Stakeholder participation through existing and new channels
- Financial mechanisms and incentives including revolving funds and private participation
- Environmental regulations to protect future users from any contamination
- Model district with modern but environmental friendly housing and/or light industry



# Role of International Cooperation



# Local Capacity Building Process



# Conclusion

1. Delayed actions will increase the costs in terms of health loss due to contamination, forgive benefits of reuse, and higher cleanup and construction costs in future
2. Redevelopment of brownfields into modern district will boost the business and improve the living standards in HCM city
3. Stakeholder participation from private sector, civil society, local government, and community on a whole is vital, and this participation could be boosted though awareness campaigns and through financial and institutional mechanisms
4. Learning from international experiences to plan and implement policies and mechanisms for local challenges could be the key to accelerate the pace of brownfields redevelopment