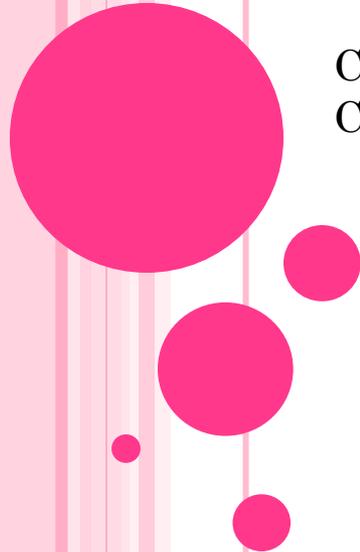


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**“PARTICIPATORY SUSTAINABILITY APPROACH TO VALUE  
CAPTURE-BASED URBAN RAIL FINANCING IN INDIA  
THROUGH DELIBERATED STAKEHOLDER ENGAGEMENT”**

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# Agenda



- 1. Context**
- 2. Need of the hour**
- 3. Stakeholder engagement benefits in a VC process**
- 4. The current research focus**
- 5. Participatory sustainability approach**
- 6. Participatory Strategic Value Capture (PSVC) Framework**
- 7. Case study: Bangalore suburban rail project**
- 8. Conclusions**

**Acknowledgments**

**References and Notes**

# Context

- Increasingly cities around the world are seeking innovative financial mechanisms to build urban rail transit projects.
- Land value capture (VC) is a financing mechanism to fund urban rail transit.
- Often VC mechanisms are viewed only as a financing tool applied in relation to increased land values from the administration and legislation perspectives, without actively involving the community in the process.
- The transit beneficiary community and city tax payers are especially important stakeholders in this process as their willingness to participate is really critical to the overall VC success and transport outcome.

# Need of the hour?

- Globally, though many recent VC based financing experiences but are limited from the stakeholder engagement perspective
- Further, there is a limited research with regards to the community engagement aspects of the VC process, especially in a rail transit financing context
- There emerges a need for a solution approach for stakeholder engagement in a VC process in a rail transit financing context, especially to address the following?
  - Who shall be engaged?
  - What are the engagement interests?
  - Where and how to engage?
  - Is there any defined engagement approach?
  - What are the appropriate engagement techniques?
  - How to evaluate engagement success?, ..

**Precisely, the current research focus to address the above!**

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# Stakeholder engagement benefits in a VC process

- Increasingly cities around the world are seeking innovative financial mechanisms to build urban rail transit projects.
- Land value capture (VC) is a financing mechanism to fund urban rail transit.
- Often VC mechanisms are viewed only as a financing tool applied in relation to increased land values from the administration and legislation perspectives, without actively involving the community in the process.
- The transit beneficiary community and city tax payers are especially important stakeholders in this process as their willingness to participate is really critical to the overall VC success and transport outcome.

# The current research focus

The current research suggest the following community engagement aspects in a VC based rail financing context:

- Introduces a ‘Participatory Sustainability Approach’ to stakeholder engagement
- Proposes a four-step ‘Participatory Strategic Value Capture’ (PSVC) framework in defining VC process involving stakeholders
- Describes the application of this framework in Bangalore to examine the benefits of utilizing participatory approaches in defining a VC process
- Assesses the replicability of this PSVC framework to assist other cities worldwide looking to undertake a VC process to deliver public transport involving stakeholder engagement

# Participatory sustainability approach

- OECD (2003) [26] (p.30) classify stakeholder engagement into three forms of engagement: information sharing, consultation and participation.
- Current VC practices so far have limited the community participation either to information sharing or to consultation approaches only.
- The third level, ‘participation’, enables stakeholders to be involved in the decision making process.

# Participatory sustainability approach (contd.)

- The core principle of participatory sustainability approach in a VC context examined in this paper is primarily engagement of community through a participatory route utilizing deliberative democratic methods.
- Participatory sustainability approach facilitates participation through most popular deliberative democratic methods to aid VC decision making and stakeholder deliberations.

**Now we need a framework offering step-by-step guidance to adopt the approach to VC process.**

**...Here we propose PSVC Framework**

# Participatory Strategic Value Capture (PSVC) Framework

PSVC framework offers a platform from which to undertake the stakeholder engagement process in VC based rail transit financing projects at various stages of the VC process life cycle from initiation to the operationalization on a continuous basis. PSVC framework is comprised of a sequential four-step stakeholder engagement model:

**Step 1:** Identify and classify the VC stakeholders groups.

**Step 2:** Define stakeholder engagement interventions and objectives across the VC life cycle.

**Step 3:** Identify appropriate DD techniques to be used across the VC life cycle.

**Step 4:** Periodic review of the effectiveness of stakeholder engagement across the VC life cycle.

**Now, let us look at each of these steps in detail..**

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# Step 1: Identify and classify the VC stakeholders groups

Step one involves identifying and classifying the potential project stakeholders as shown below for a VC based rail transit financing projects context:

Group	Stakeholders	Aspirations
Investors	<ul style="list-style-type: none"> <li>Public agencies</li> <li>Private sector</li> <li>Local Bodies</li> <li>Railway agencies</li> <li>Donor agencies</li> </ul>	<ul style="list-style-type: none"> <li>Build infrastructure</li> <li>Improved productivity</li> <li>Return on investment</li> <li>Regulations &amp; budget</li> <li>Sustaining operations</li> </ul>
Beneficiary	<ul style="list-style-type: none"> <li>Land owners</li> <li>Real-estate</li> <li>Developers</li> <li>Businesses</li> <li>Vacant Public land</li> </ul>	<ul style="list-style-type: none"> <li>Land values appreciation</li> <li>Windfall gain</li> <li>Speculation</li> <li>Private developments</li> <li>Land banking</li> </ul>
Community	<ul style="list-style-type: none"> <li>Local residents</li> <li>Local businesses</li> <li>Low-income group</li> <li>Civic societies</li> <li>Precinct community</li> </ul>	<ul style="list-style-type: none"> <li>Improved accessibility</li> <li>Improved commuting</li> <li>Improved business</li> <li>Value shareholders</li> <li>Sustainable mobility</li> </ul>

# Step 2: Define stakeholder engagement intervention and objectives across VC life cycle

VC Life Cycle Stages	VC Key Processes	Engagement Objectives
<b>1</b> Initiation: VC Concept	<ul style="list-style-type: none"> <li>• Need and Problem definition</li> <li>• Project Objectives</li> <li>• Transit Network feasibility</li> <li>• legislation and regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Information sharing</li> <li>• Public workshop</li> <li>• Need validation</li> <li>• Consultation</li> </ul>
<b>2</b> Planning: VC Planning	<ul style="list-style-type: none"> <li>• VC catchment identified</li> <li>• Transit beneficiary analysis</li> <li>• Land value impact analysis</li> <li>• Stakeholder groups identified</li> </ul>	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Willingness to Pay</li> <li>• Commitment</li> <li>• Participation</li> </ul>
<b>3</b> Design: VC Design	<ul style="list-style-type: none"> <li>• VC funding assessment</li> <li>• VC mechanisms identified</li> <li>• Sustainable development focus</li> <li>• Transit-Land Use Integration</li> </ul>	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• VC Instruments</li> <li>• VC Incentives</li> <li>• In Steering Group</li> </ul>
<b>4</b> Strategize: VC Strategies	<ul style="list-style-type: none"> <li>• Value Proposition defined</li> <li>• VC Fund structure established</li> <li>• Stakeholder gain share model</li> <li>• Value redistribution focus</li> </ul>	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Entrusting community</li> <li>• Accountability</li> <li>• Responsibility</li> </ul>
<b>5</b> Execute: VC Implementation	<ul style="list-style-type: none"> <li>• VC implementation tools</li> <li>• Fund management</li> <li>• Organizational focus</li> <li>• Accountable Transactions</li> </ul>	<ul style="list-style-type: none"> <li>• Inclusive Governance</li> <li>• Deliberation</li> <li>• Engagement</li> <li>• Transparency</li> </ul>
<b>6</b> Operation: VC Governance	<ul style="list-style-type: none"> <li>• Start payback to investment</li> <li>• Redistribution to community</li> <li>• Monitoring &amp; evaluation</li> <li>• Periodic revisit to VC model</li> </ul>	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Review &amp; evaluation</li> <li>• Sustainability focus</li> <li>• Benefit assessment</li> </ul>

# Step 3: Identify appropriate DD techniques to be used across the VC life cycle

VC Life Cycle Stages	Engagement Objectives	DD Engagement Techniques
<b>1</b> Initiation: VC concept	<ul style="list-style-type: none"> <li>• Information sharing</li> <li>• Public workshop</li> <li>• Need validation</li> <li>• Consultation</li> </ul>	<ul style="list-style-type: none"> <li>• Consensus forum</li> <li>• World Café</li> </ul>
<b>2</b> Planning: VC planning	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Willingness to Pay</li> <li>• Commitment</li> <li>• Participation</li> </ul>	<ul style="list-style-type: none"> <li>• 21<sup>st</sup> Century Dialogue</li> <li>• Open Space Technology</li> <li>• Multi Criteria Analysis</li> </ul>
<b>3</b> Design: VC Design	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• VC Instruments</li> <li>• VC Incentives</li> <li>• In Steering Group</li> </ul>	<ul style="list-style-type: none"> <li>• World Café</li> <li>• Open Space Technology</li> <li>• Multi Criteria Analysis</li> </ul>
<b>4</b> Strategize: VC strategies	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Entrusting community</li> <li>• Accountability</li> <li>• Responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Local Area Forum</li> <li>• Consensus Forum</li> <li>• Multi Criteria Analysis</li> </ul>
<b>5</b> Execute: VC Implementation	<ul style="list-style-type: none"> <li>• Inclusive Governance</li> <li>• Deliberation</li> <li>• Engagement</li> <li>• Transparency</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic questioning</li> <li>• Local Area Forum</li> <li>• Open Space Technology</li> </ul>
<b>6</b> Operation: VC Governance	<ul style="list-style-type: none"> <li>• Deliberation</li> <li>• Review &amp; Evaluation</li> <li>• Sustainability focus</li> <li>• Benefit assessment</li> </ul>	<ul style="list-style-type: none"> <li>• World Café</li> <li>• Open Space Technology</li> <li>• Multi Criteria Analysis</li> </ul>

## Step 4: Periodic review of the effectiveness of stakeholder engagement across the VC life cycle

Step four involves reviewing the stakeholder engagement model undertaken. From time to time it is advisable to have a check point to measure the effectiveness of the engagement performance and also evaluate any risk groups or dependent activities. This is, however, project specific. Therefore at the beginning of the VC process itself, check points or stages to measure the performance need to be identified.

# Case Study: Bangalore suburban rail project

## Background

- ❑ Bangalore city in India is proposed to implement a suburban rail system to link Bangalore to surrounding cities within a radius of 50-70km in order to help reduce dependence on road-based transportation.
- ❑ Currently, the proposed suburban rail plan is to use the existing inter-state rail network of about 370kms to connect towns, suburbs and the inner city through introducing capacity and improving the frequency of operations.
- ❑ According to the VC lifecycle, the current project progress can be defined as between **the 'Initiation and 'Planning'** stages. Though conceptually the project initiation and feasibility study was completed in the year 2013, the participatory route through stakeholder engagement has not been initiated so far.

# Case Study: Bangalore suburban rail project

## Highlights

- ❑ Under the auspices of AusAID sponsorship a two-day stakeholder deliberation workshop on “Bangalore Suburban Rail project: potentials for innovative financing and planning strategies” was held on 9-10 October, 2013, in Bangalore, India.
- ❑ The workshop used a participatory sustainability approach and applied the PSVC framework to undertake the stakeholder engagement using appropriate DD techniques.
- ❑ The high level DD techniques identified for the Bangalore workshop deliberations were: **21<sup>st</sup> Century Town Meeting/Dialogue, Multi Criteria Analysis and Open Space Technology**
- ❑ Applied PSVC framework with its four step model. The outcome is very encouraging with active deliberation and participation.

# Case Study: Bangalore suburban rail project

## Results & Discussion

- ❑ At the end of the event, the workshop results and processes were analyzed and the engagement model used was found to be very positive. Active deliberations were reflected from the results.
- ❑ All stakeholder groups unanimously agreed that land VC based financing was appropriate for the project and also suggested barriers and opportunities in the current system along with solutions for the alternatives proposed.
- ❑ Overall using the DD process uniquely transformed the role the public normally plays in traditional community consultation from combative and divisive to cooperative and co-intelligent.
- ❑ Though it was a successful deliberation within the given constraints of time, the stakeholder participation has not yet translated into engagement levels as project is still in planning.

# Conclusion

- ❑ VC integrates the land use and transit system to enable an alternate revenue source which is traditionally ignored due to a flawed revenue focus. However just doing VC as a pure revenue raiser instead of incorporating a participatory approach is likely to lead to inequitable results.
- ❑ A participatory approach is thus an essential element of all VC planning and implementation processes.
- ❑ To this end, the PSVC framework using deliberative democracy engagement techniques is a unique attempt to enable stakeholder participation in the VC process and also enable stakeholder participation to strengthen the outcomes of the VC process.

# Conclusion

- ❑ The PSVC framework applied case study results suggest that it provides a powerful tool to visualize the value of the project from all stakeholders and enables increased acceptance and understanding of the project.
- ❑ Furthermore, the PSVC framework has the potential to be applied to stakeholder engagement in any VC based transit financing project globally and could be extended to other forms of VC based urban infrastructure investment by modifying the objectives and the stakeholder groups to reflect the context of the project.

In conclusion, stakeholder driven VC approaches can shape and reshape any transit oriented development in compliance with sustainable development goals including community aspirations with well-defined value creation and value redistribution strategies upfront.

End

(Note: Read paper for more details)



**THANK YOU FOR YOUR ATTENTION**

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