



Some Impacts on the Lower Reaches of Maha Oya Basin



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“Human activity is putting such a strain on the natural functions of the Earth that the ability of the planet’s eco systems to sustain future generations can no longer be taken for granted”.

World Bank Report - 12 April 2005, Chaired by

Robert Watson, Chief Scientist, WB

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Is this Maha Oya ?

Maha Oya Boundary

Clay Pits



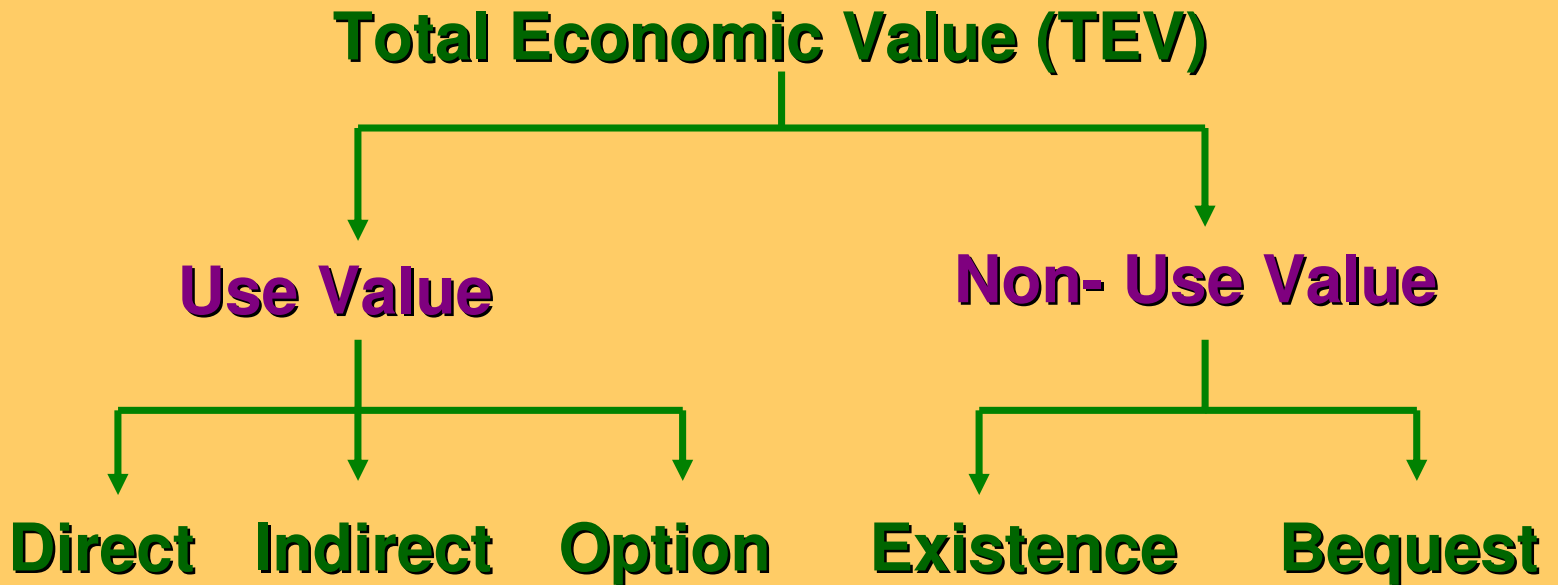




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$$\text{TEV} = \text{DUV} + \text{IUV} + \text{OV} + \text{EV} + \text{BV}$$

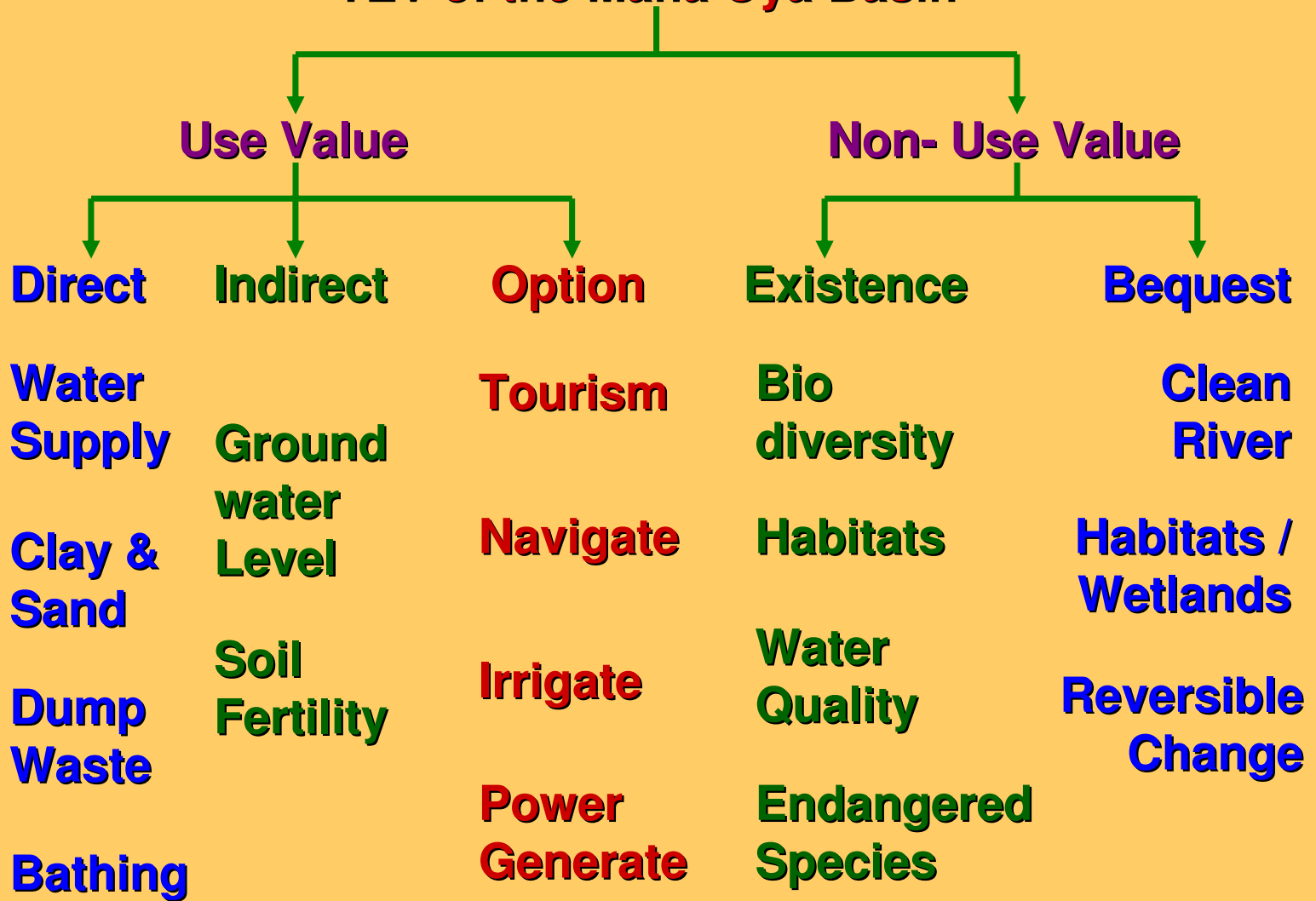


Decreasing "Tangibility of Value" to individuals

Total Economic Value of a Resource/Asset



TEV of the Maha Oya Basin





Case Study

Clay Mining on the Maha Oya Basin in Sri Lanka



Reconciling Private Profitability and Social Costs: The Case of Clay Mining in Sri Lanka

Malik Ranasinghe

***Project Appraisal*, March 1997 Issue Vol.
12, No.1, Beech Tree Publishing, UK**



Impacts of Clay Mining

- Abandoned clay pits



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Abandoned Clay Pits & Sand



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Western
Province



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Impacts of Clay Mining

- **Abandoned clay pits**
- **Loss of productivity - abandoned paddy lands.**



Abandoned Paddy Lands

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Clay Pits

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Impacts of Clay Mining

- **Abandoned clay pits**
- **Loss of productivity - abandoned paddy lands.**
- **Increases in incidence of health problems.**



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Incidences of Malaria



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Respiratory Diseases & Off-site Costs

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Impacts of Clay Mining

- **Abandoned clay pits**
- **Loss of productivity - abandoned paddy lands.**
- **Increases in incidence of health problems.**
- **Lowering of water table levels.**



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In Search of Drinking Water



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Cost of Clay Mining in the Maha Oya Basin - Stakeholder Viewpoint



Property Right Owners

Affected Villagers

Adjoining Land Owners

Clay Excavators



Study Area – Dankotuwa DSD

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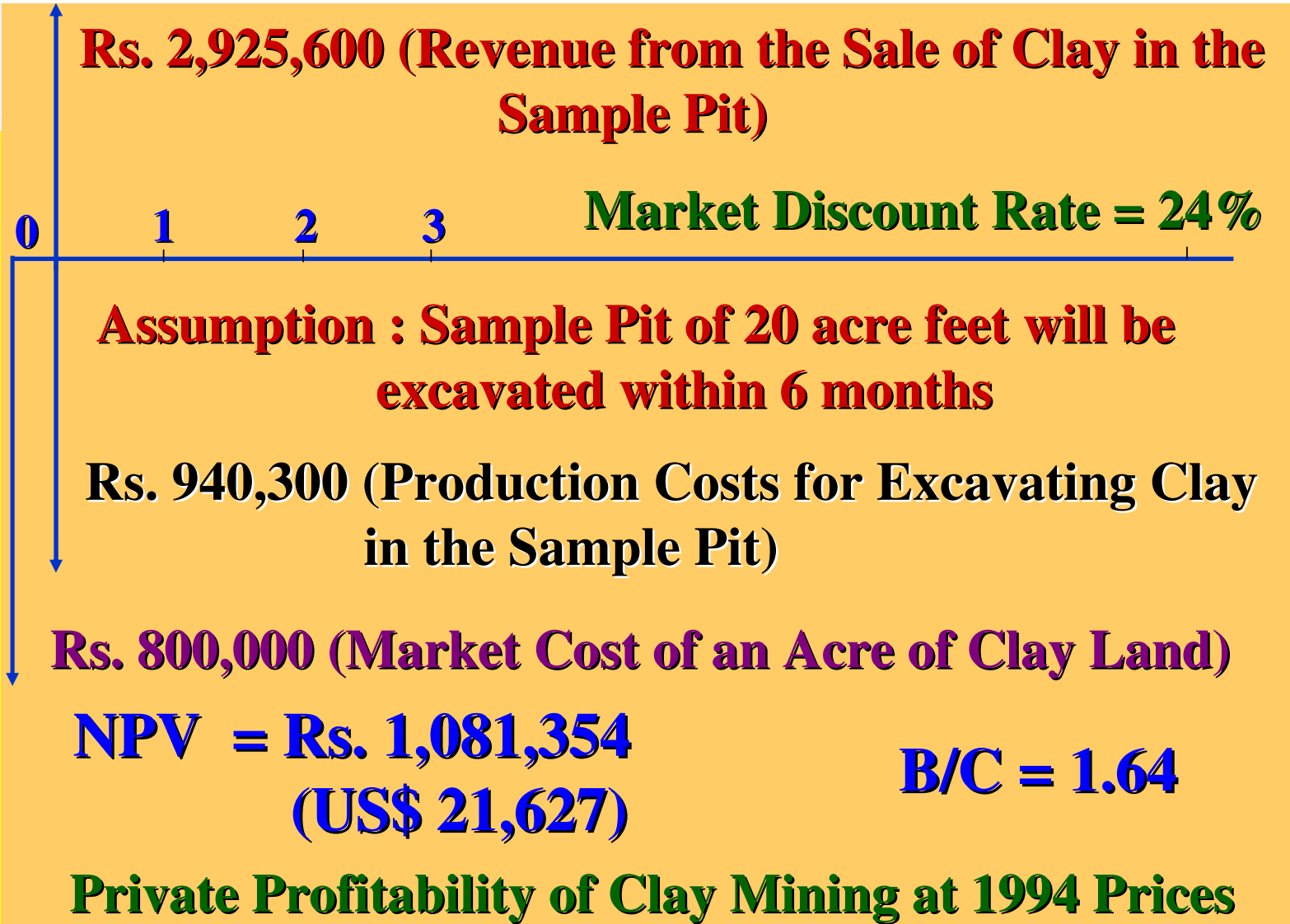


Sample Clay Pit

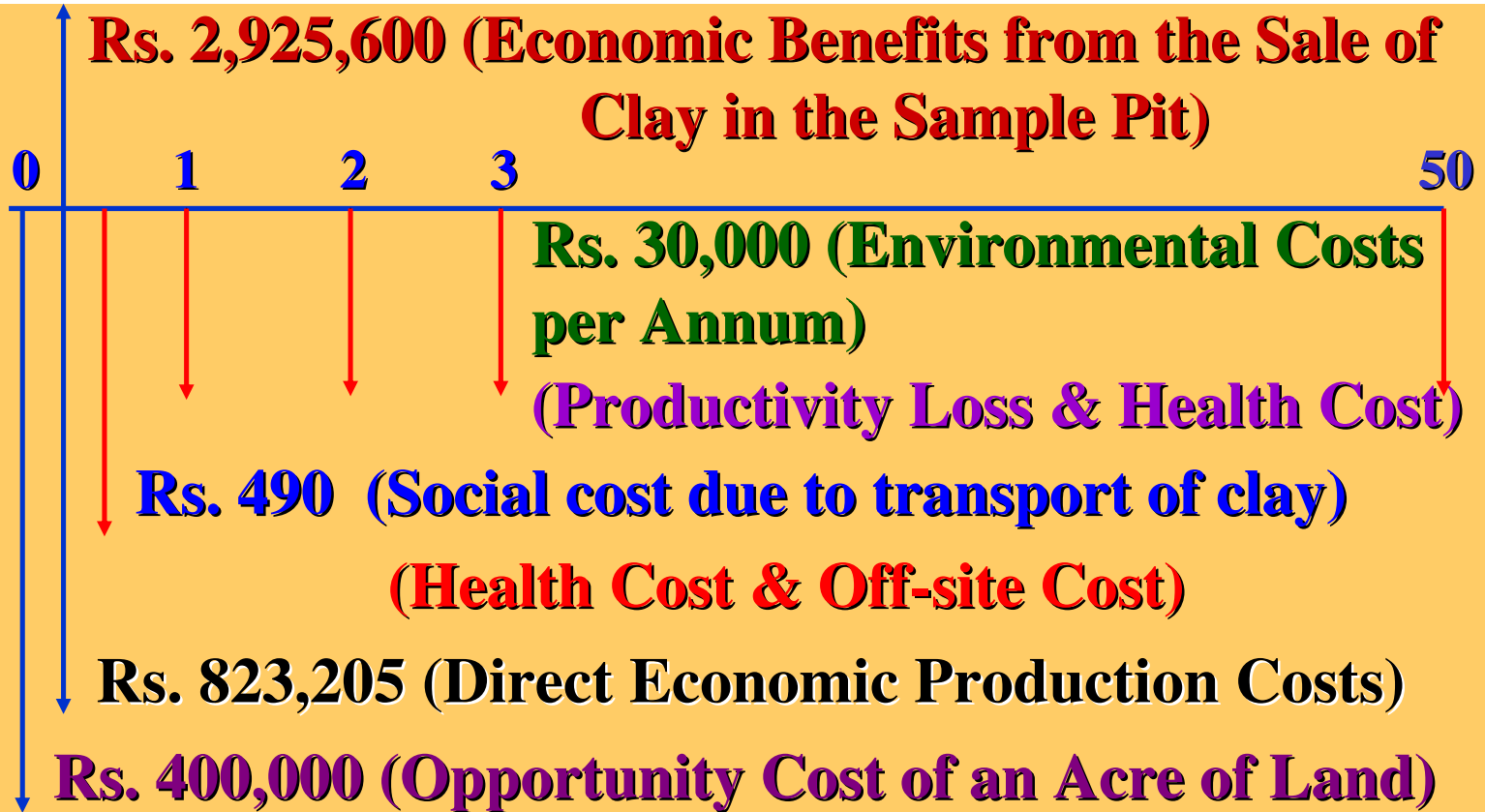
One acre in area & 20 feet in depth



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ExNPV = Rs. 1,198,659
(US\$ 23,973)

ExB/C = 1.71

Social Profitability of Clay Mining at 1994 Prices

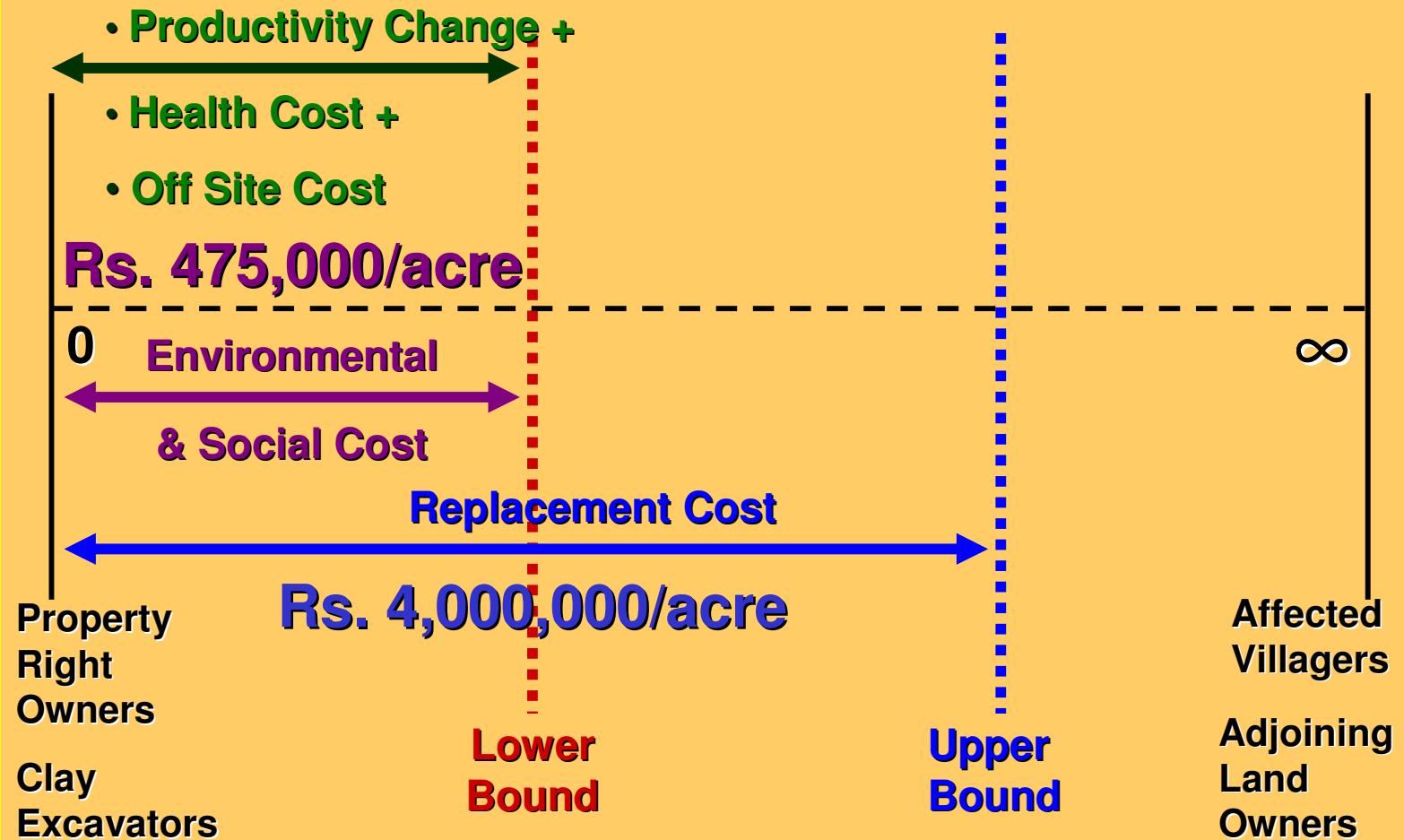


Assumption : Sample Pit will be excavated in 6 months and refilled in the next 6 months.

Restoration of the Sample Clay Pit at 1994 Prices



Summary - Stakeholder Viewpoint of the Cost of Clay Mining in the Maha Oya Basin





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Thank You !

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