



Physical and Financial Performance of Pit Emptying Technologies

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How much profit can be made emptying pits?

1. How strong is the sludge?

Strength testing

2. How well do pumps perform?

Pump testing

3. How does the business work?

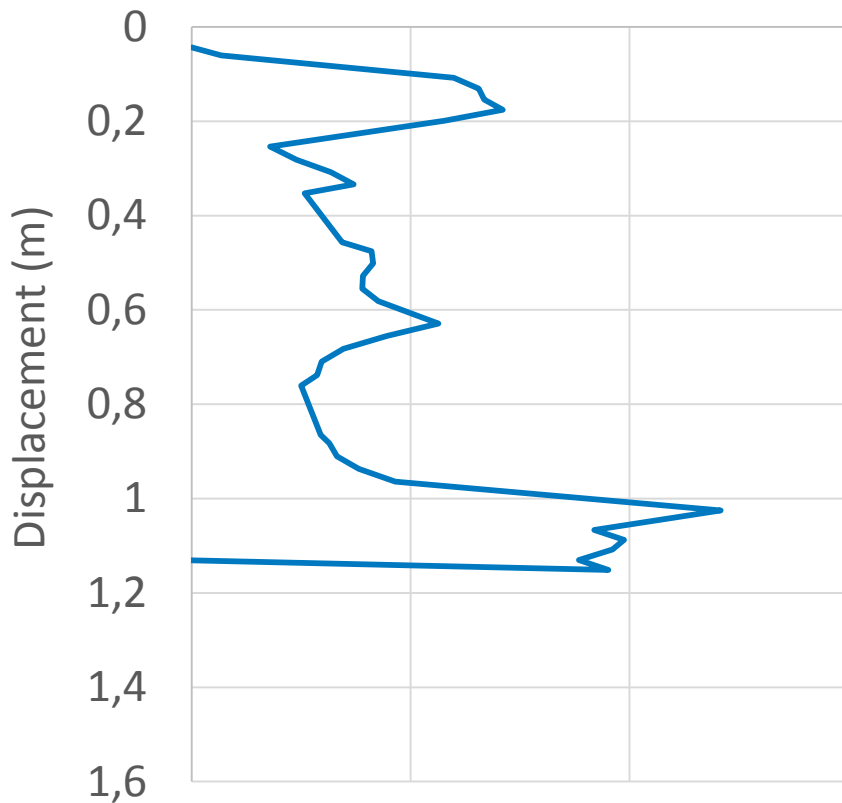
Financial model

1. How strong is the sludge?

Patna, Bihar, India – Pit 35

Strength (Pa)

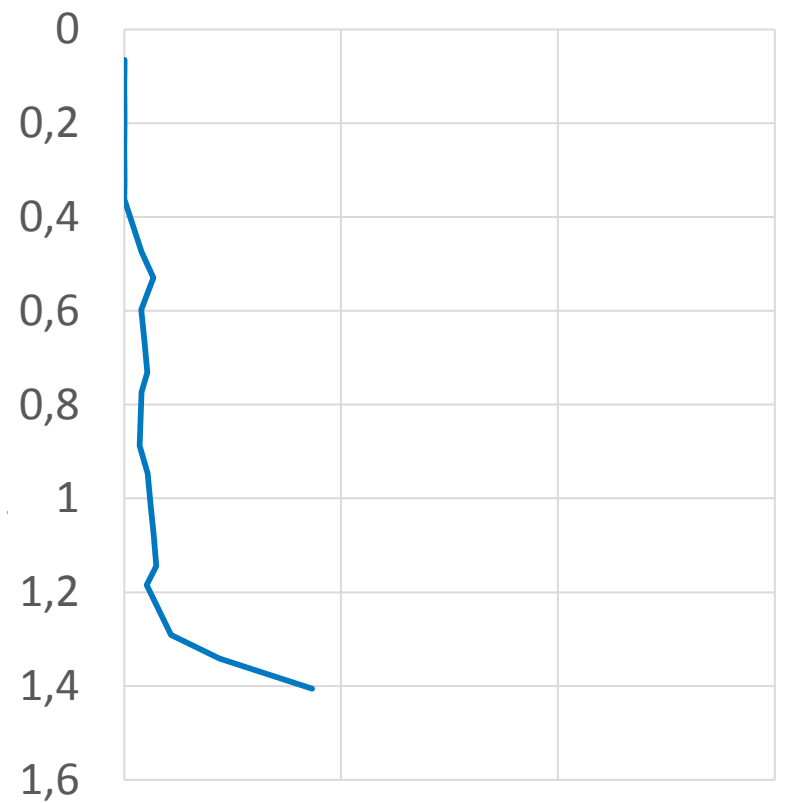
0 1000 2000 3000



S24P, W Bengal, India – Pit 07

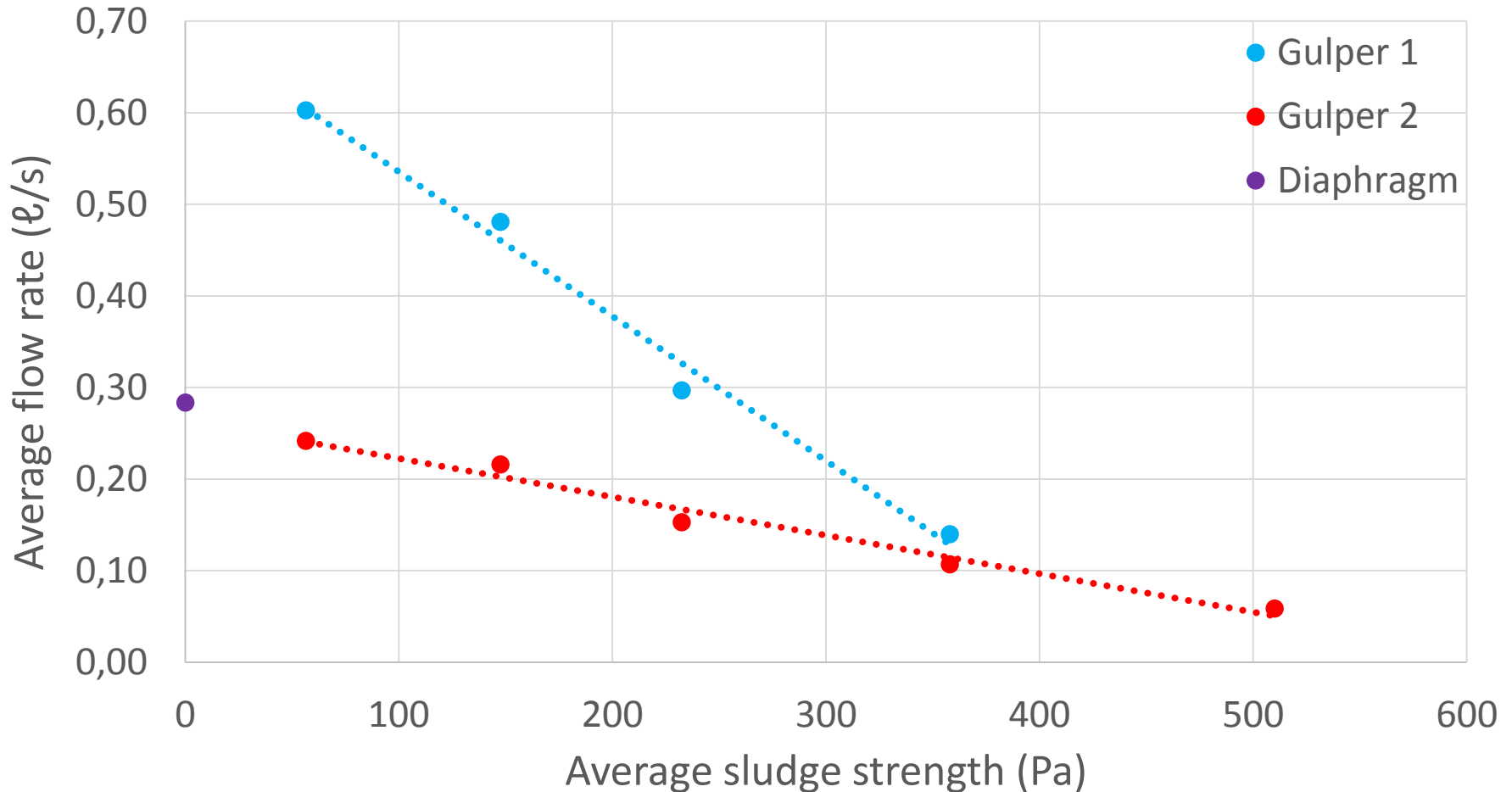
Strength (Pa)

0 1000 2000 3000

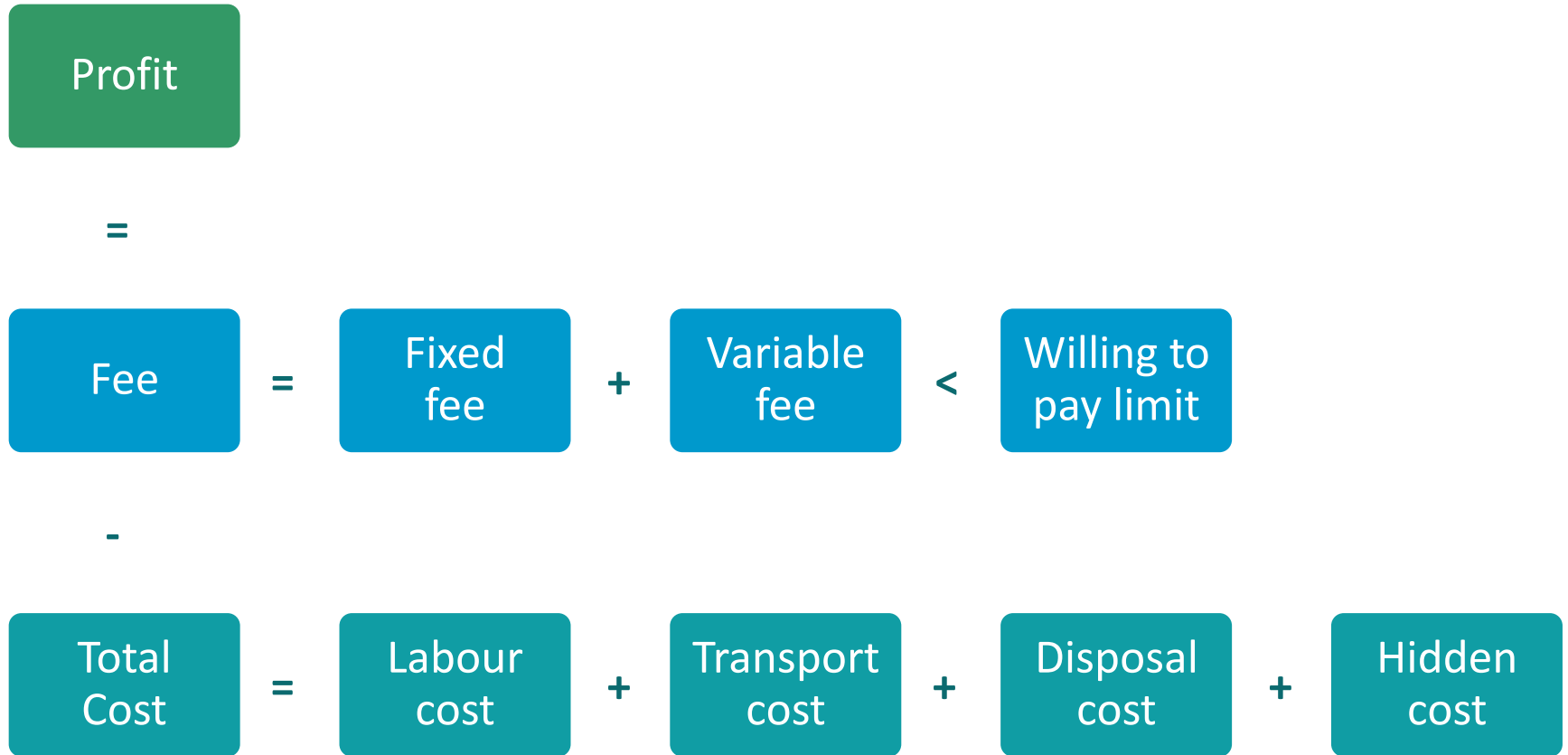


2. How well do pumps perform?

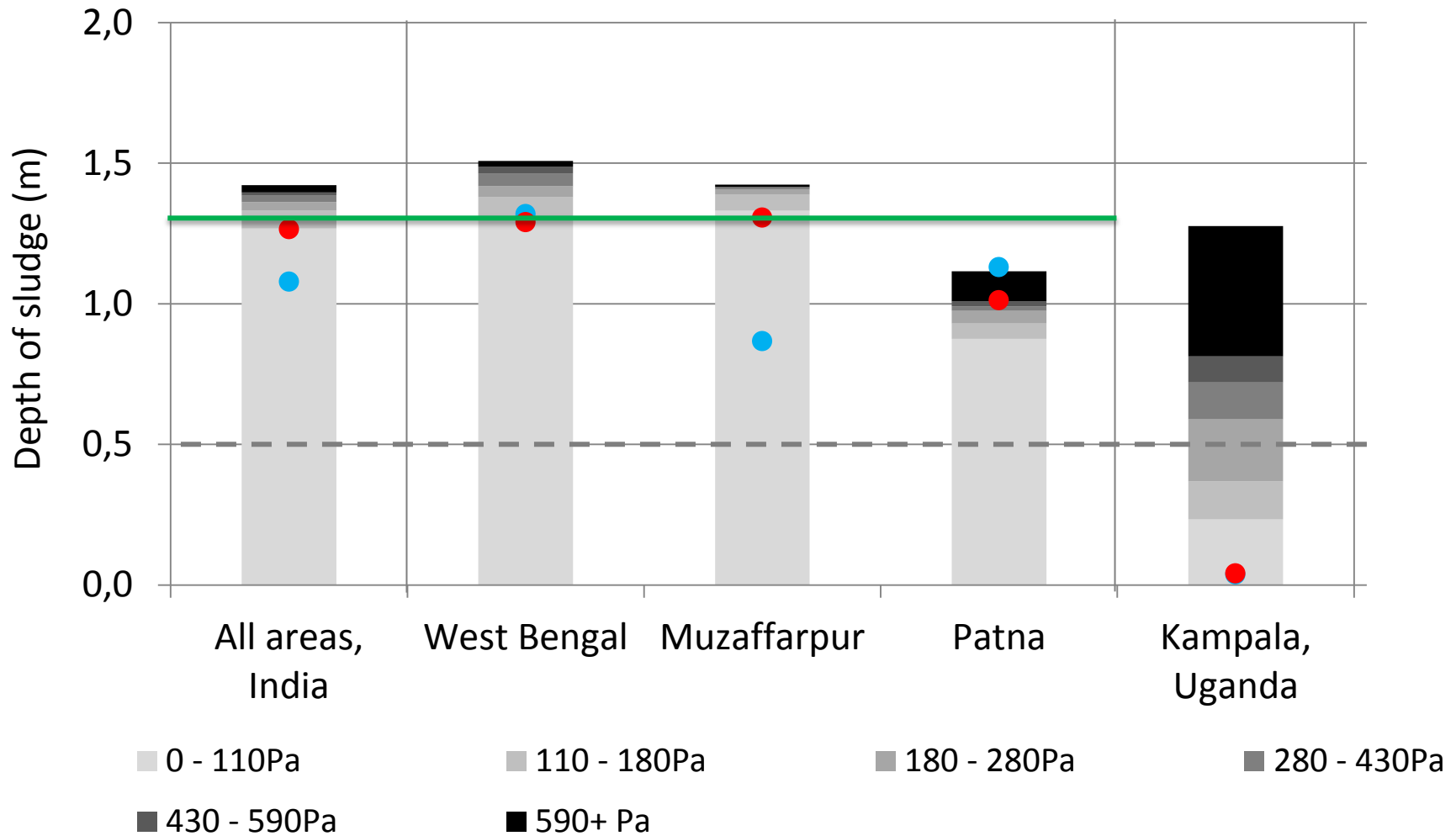
Pump testing results



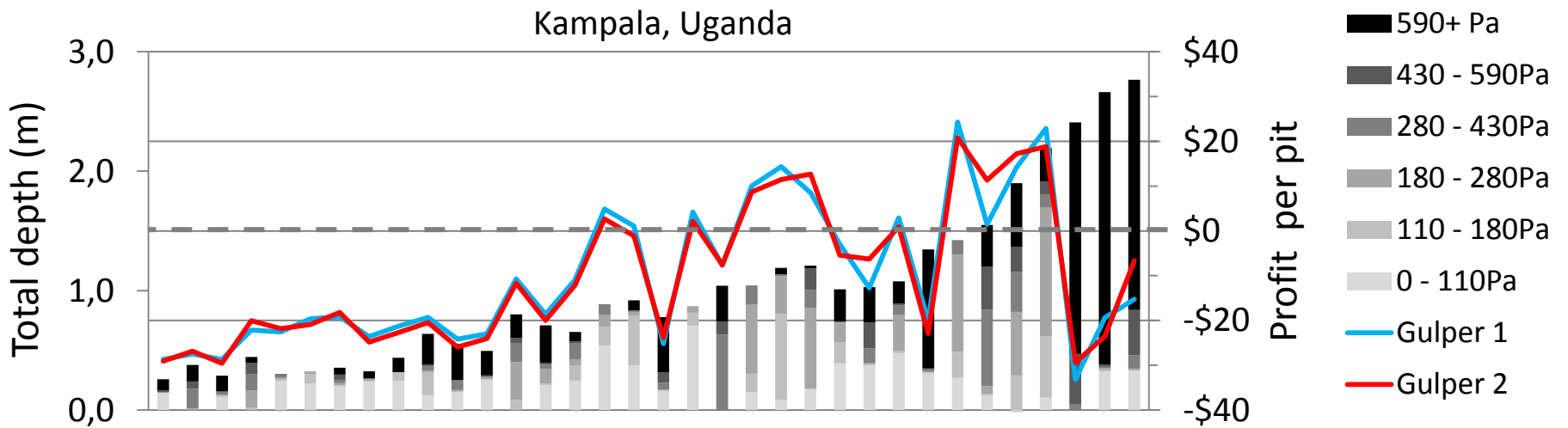
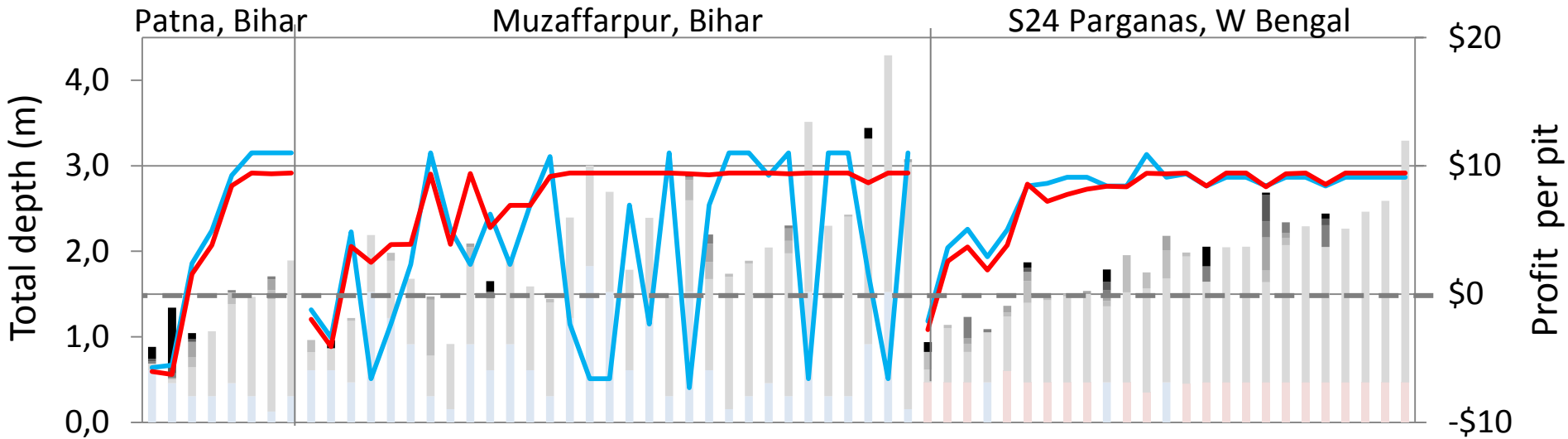
3. How does the business work?



How much profit can I make emptying pits?

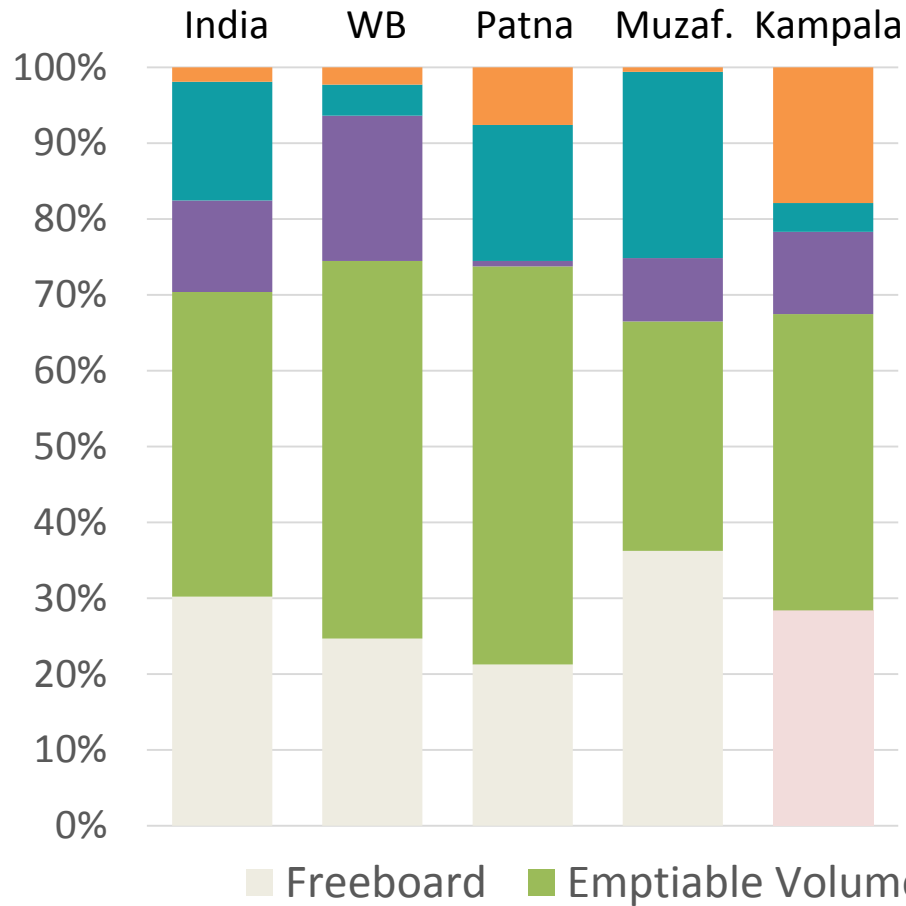


Profit breakdown by pit

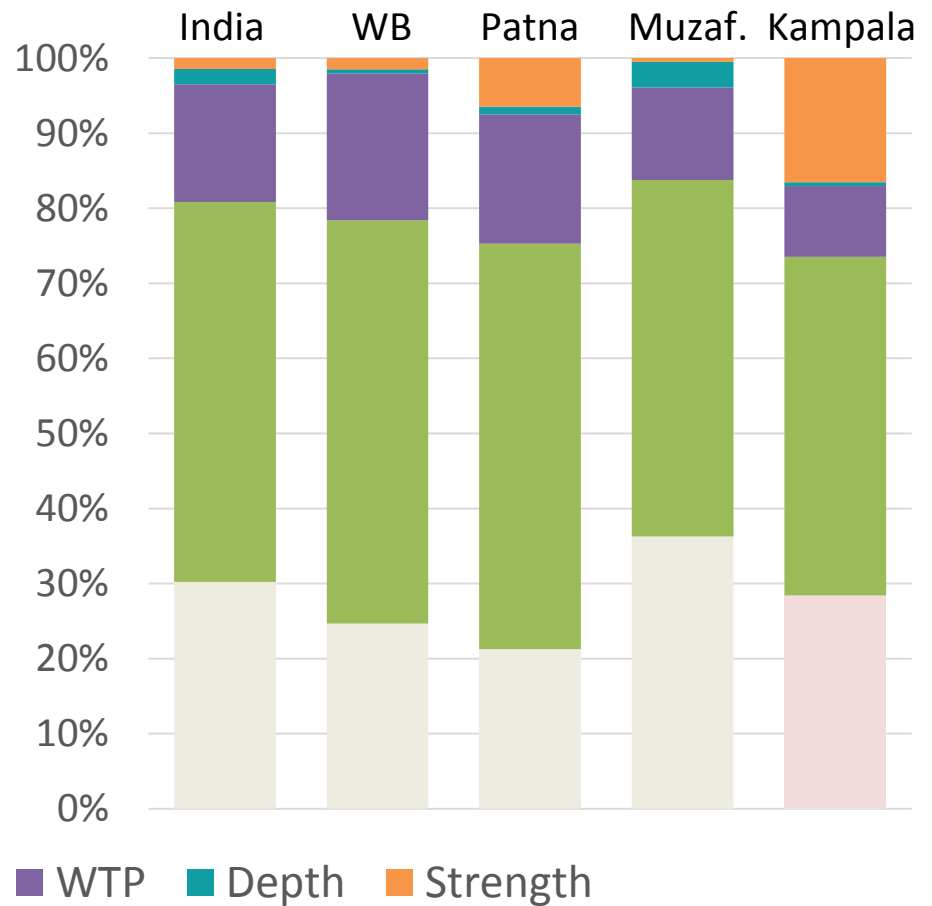


How can I increase my profit?

Limitations of Gulper 1

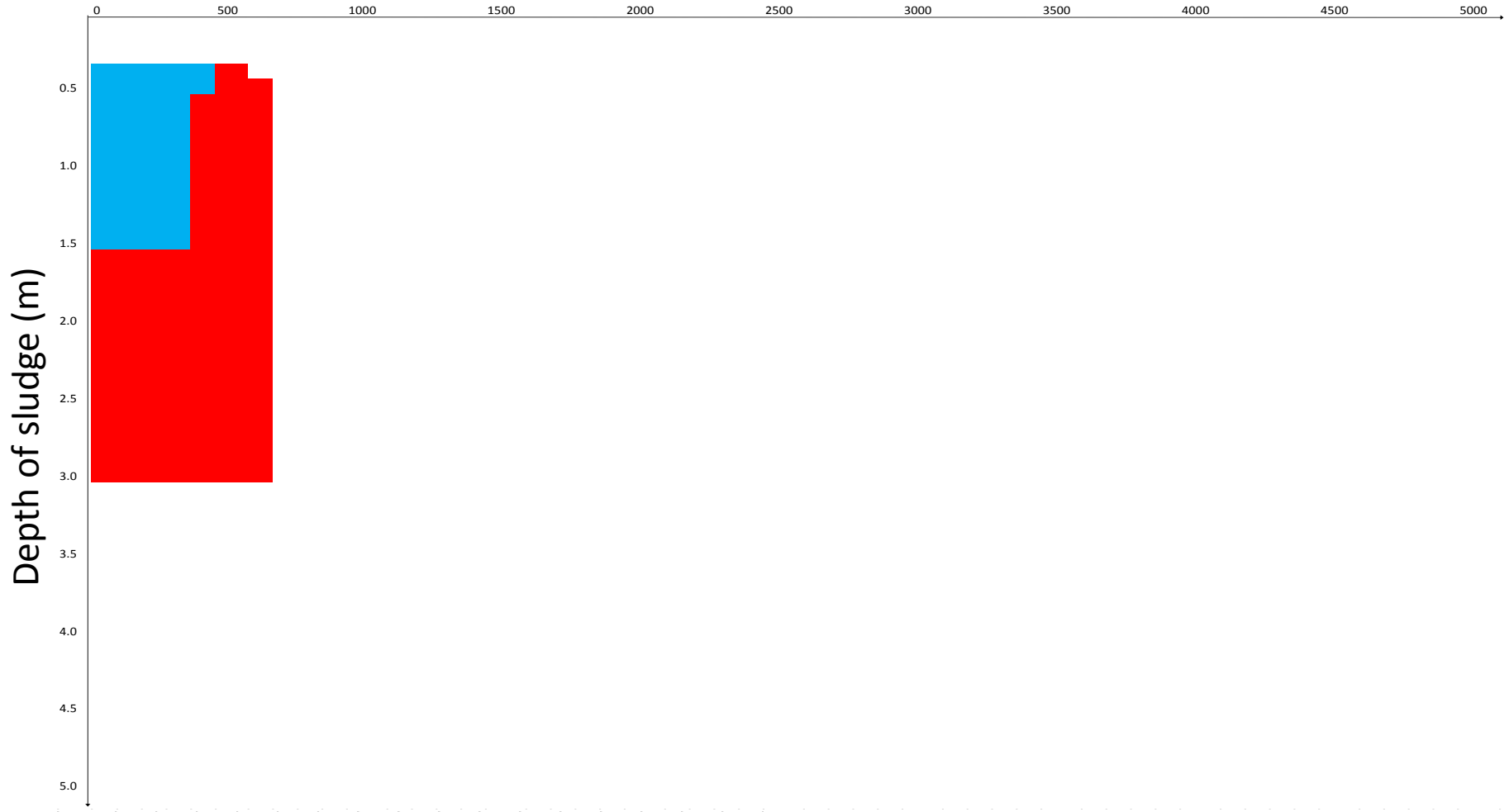


Limitations of Gulper 2



Which pump should I use?

Patna/Muzaffarpur, India Sludge strength (Pa) Kampala, Uganda



Conclusion

- Testing sludge strength and pump performance can show how to increase profit for pit emptying

Next steps

- Test more pits – link to treatment and planning
- Test more pumps – mechanised, tankers
- Include more business model options
- Web tool to inform pump selection



Thank you!

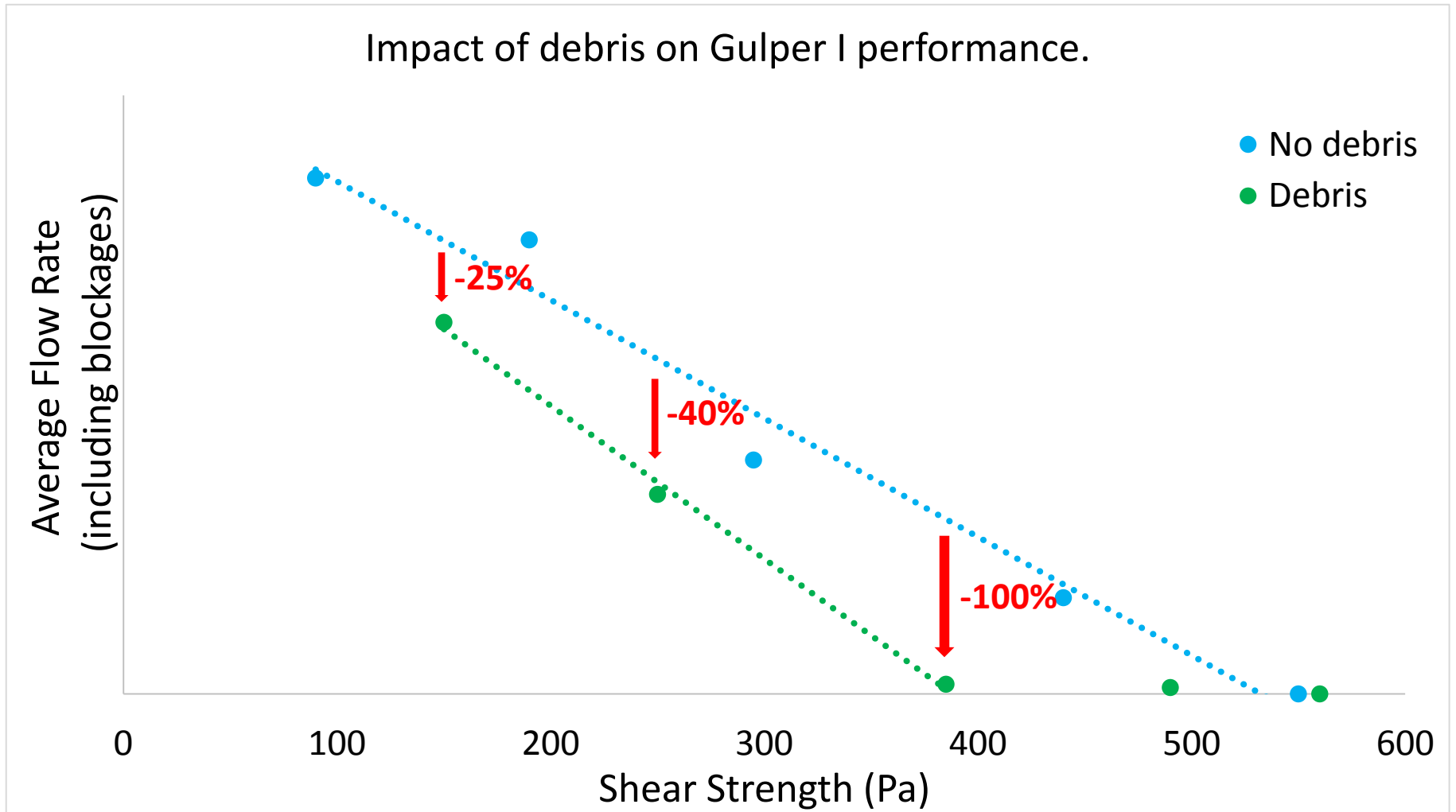
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2. How well do pumps perform?



3. How does the business work?

