

# Cost of Information

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An analysis of the production and sale of produce at the Dambulla Dedicated Economic Centre (DDEC)

# Transaction Costs

- “The costs that arise when individuals exchange ownership rights for economic assets and enforce their exclusive rights” , Eggertson (1990:15)
- Transaction costs can be classified into observable and unobservable or inhibitive transaction costs (Staal, Delgado

**Transaction Costs can be reduced when information asymmetries are reduced**

transaction takes place

- include cost of information search, bargaining, screening, monitoring, co-ordination, enforcement



# Let's call our focus the "Cost of information"

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- Cost of Information = Costs that can be reduced if accurate and timely information is available
- Examples
  - Cost of travel that can be reduced if information was available through ICT
  - Cost of searching information



# Our Aim: to quantify this “Cost of Information”

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- Estimate the **cost of information**
- Incurred by farmers from the time they decide to grow, until the time they sell the produce
- Specifically, until they sell at the Dambulla Dedicated Economic Center (DDEC)
  - DDEC is the largest whole-sale market for vegetables in Sri Lanka



# How we did it – a sample survey

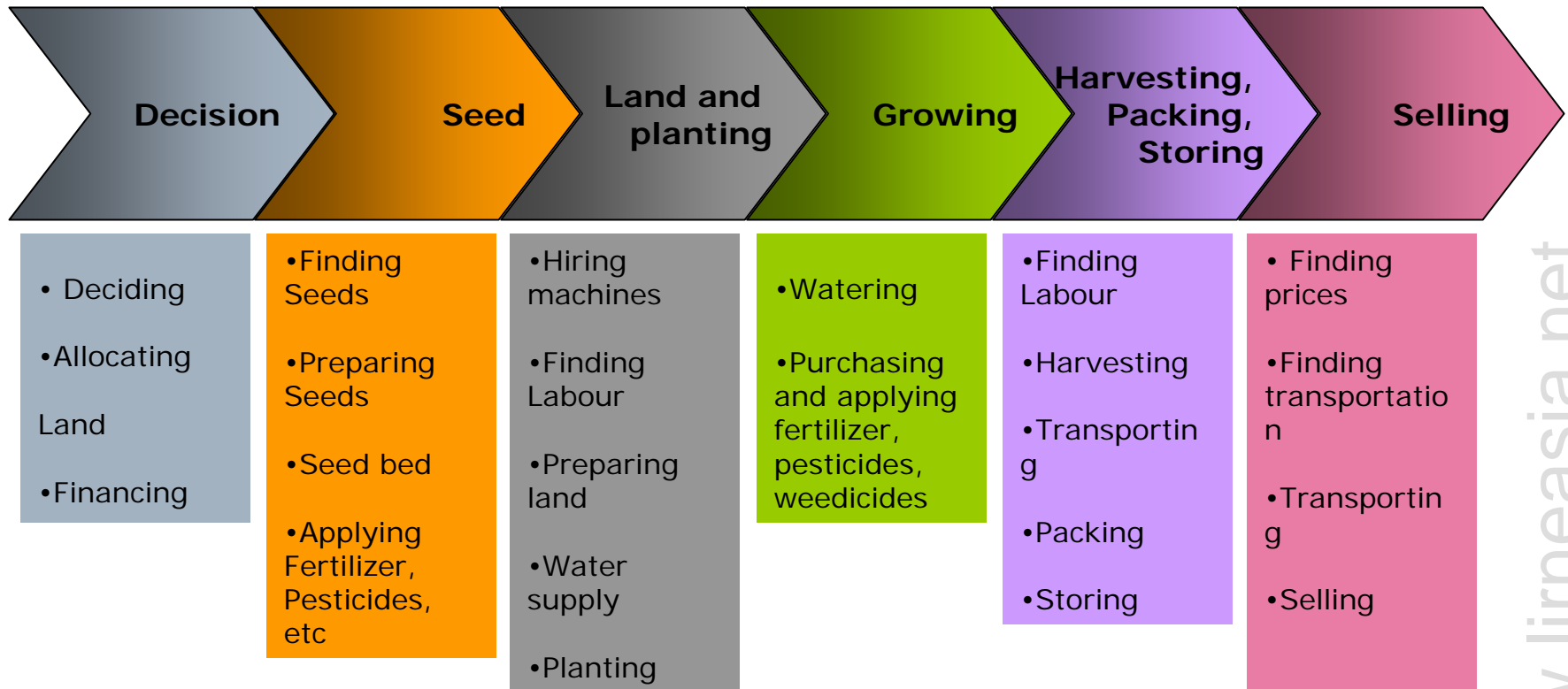
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- Random Selection of 10 (out of a total of 89) farmer associations in the Dambulla Area who sell their produce at DDEC.
- 30 farmers from each farmer association
- 300 farmers in total in the sample
- Use of a structured questionnaire
  - questions relating to the entire farming process starting from the point of decision to grow the crop to the point of selling and receiving money
- Survey done in Nov 2007
- For the 4 highest volume vegetables



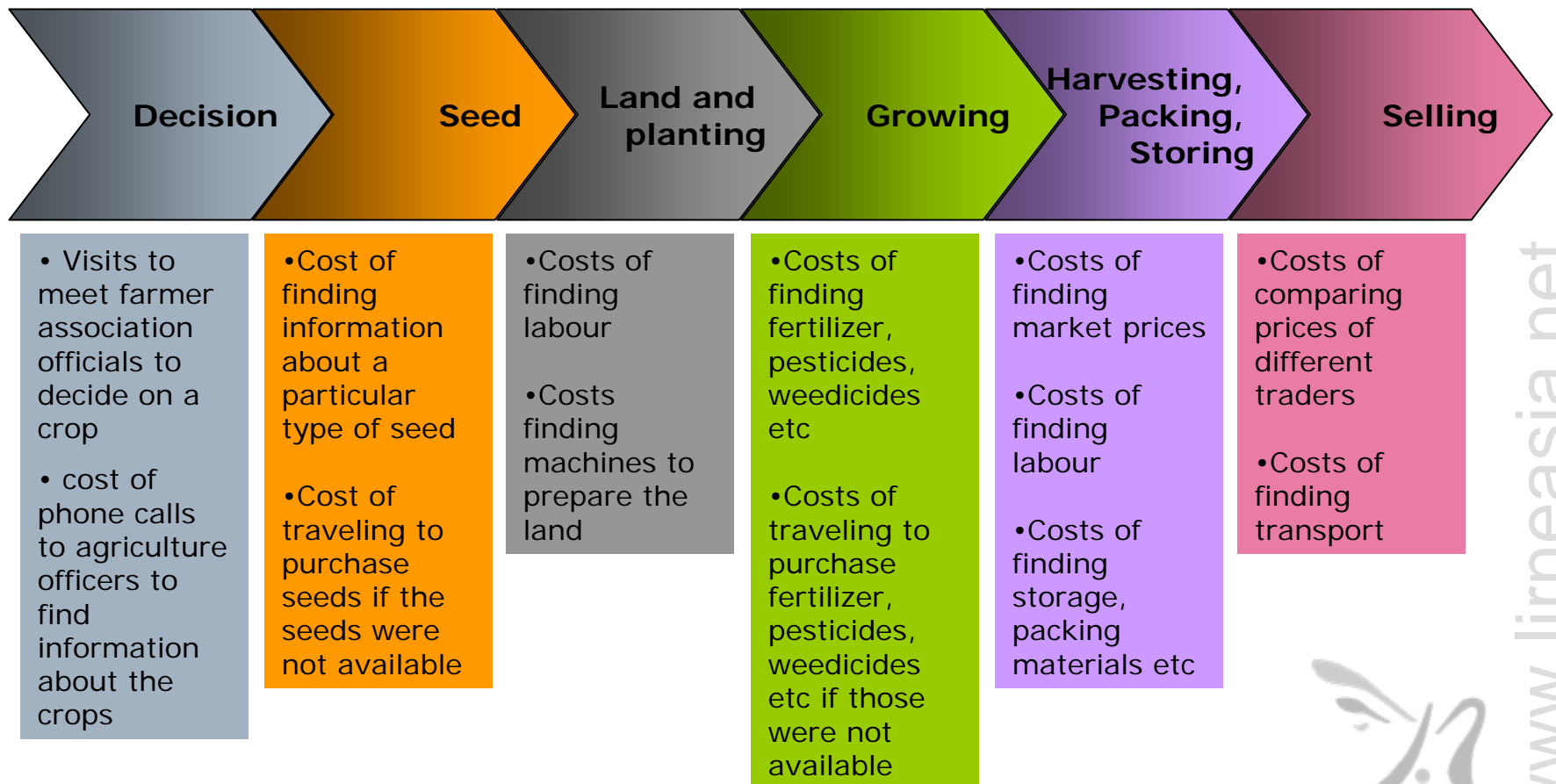


# The farming process has multiple stages



# Each stage has different “Cost of Information”

## Examples of “Cost of Information” faced



# Findings

Quantification of Transaction  
Cost, and “Cost of Information”

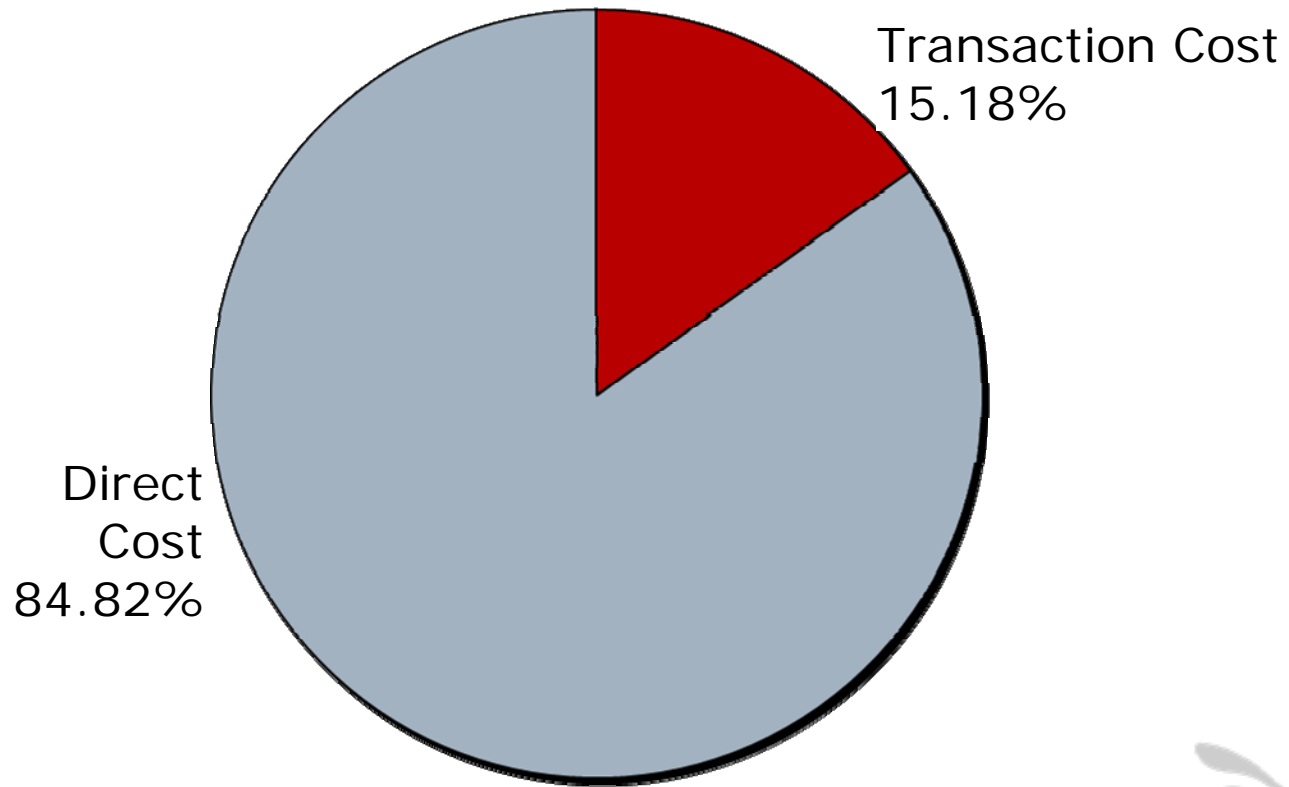


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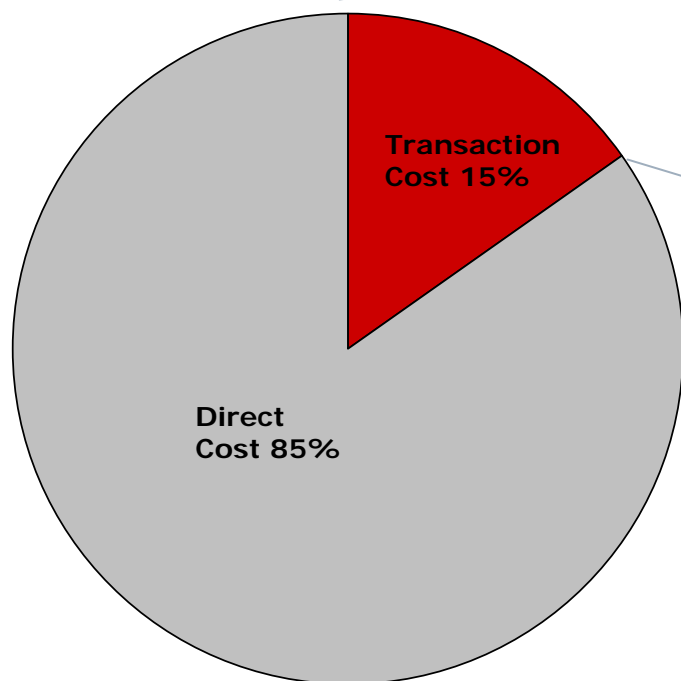
# Transaction Costs are 15% of costs incurred by farmers

Transaction Cost as a % of total cost

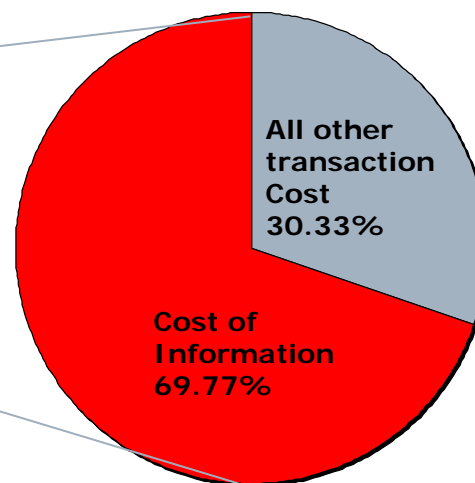


# “Cost of Information” is 70% of Transaction Costs, or 11% of Total Cost

Transaction Cost as a % of total cost

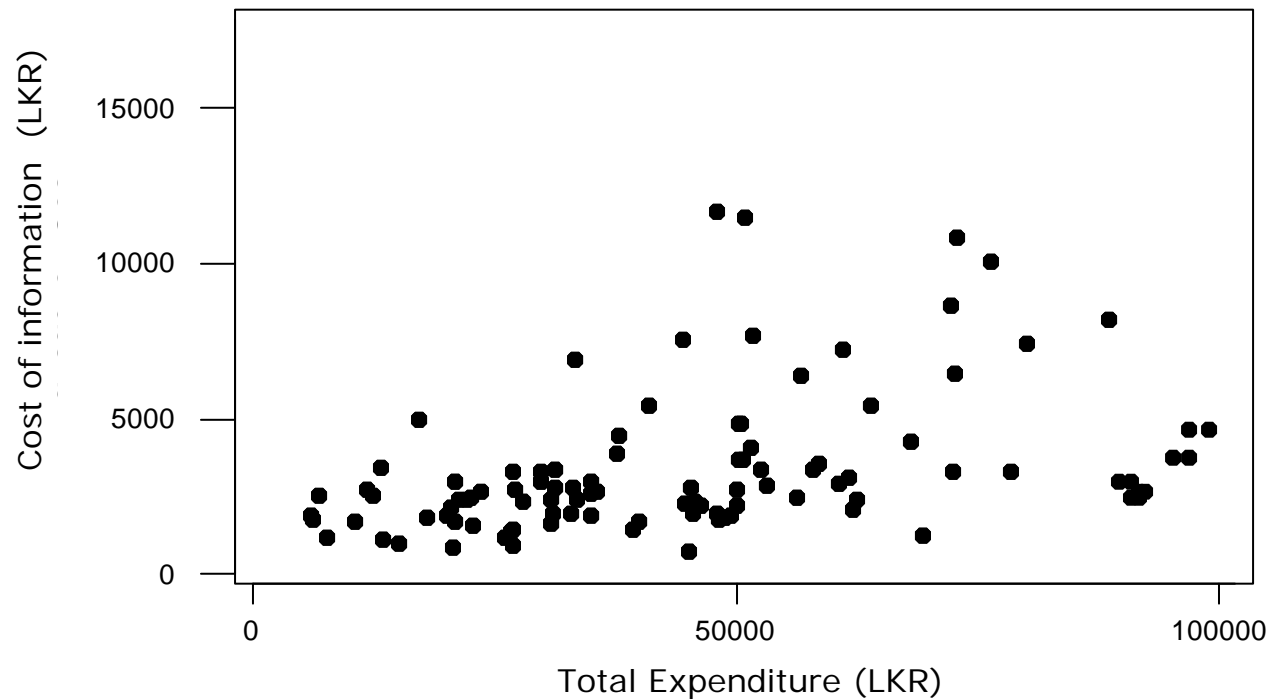


Information Cost as a % of Transaction Cost



# Small farmers feel it more:

"Cost of Information" does not vary with size of land/quantity produced/total cost

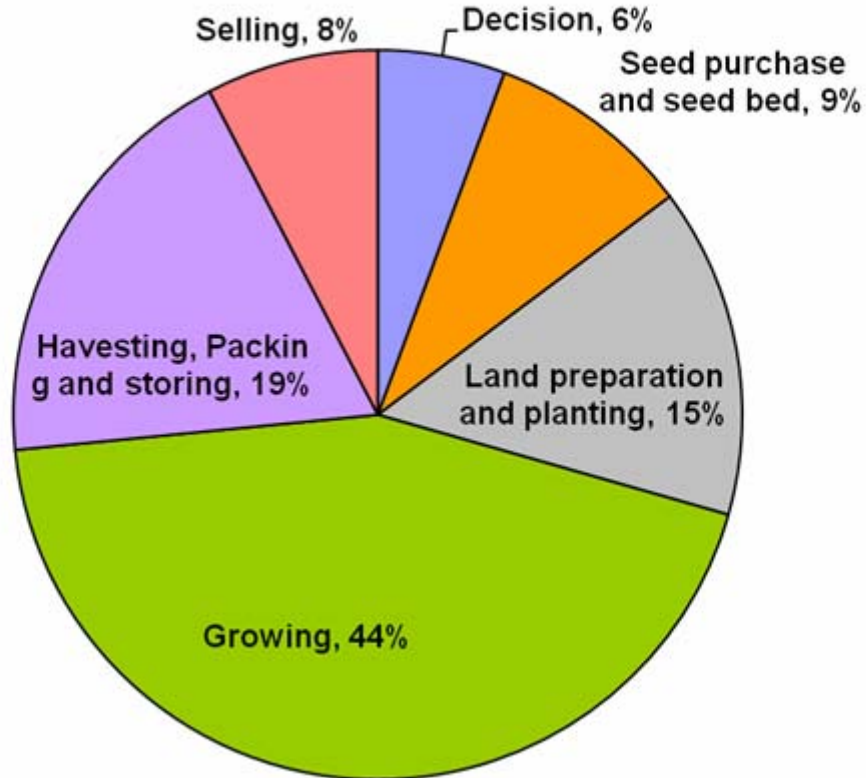


# Findings

Distribution of Costs by Stage of Production

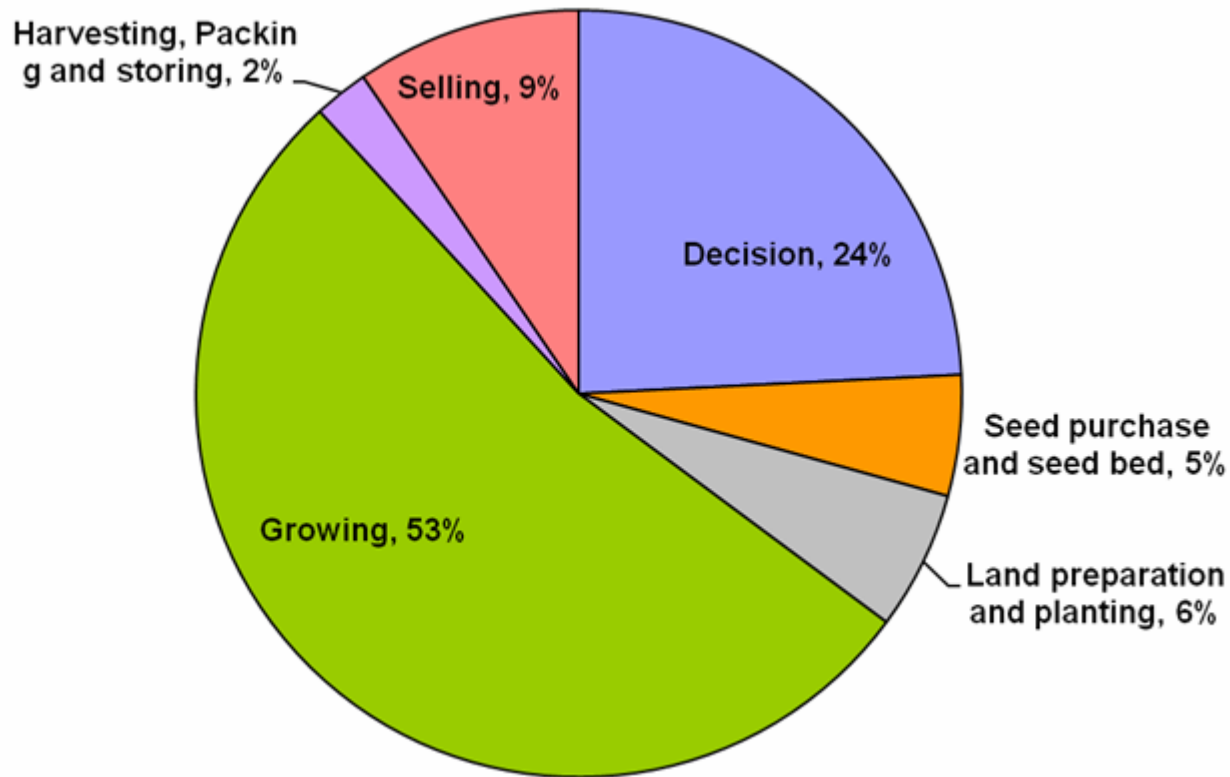
# Growth stage has 44% of total cost of production

Distribution of Total Cost by stage of production



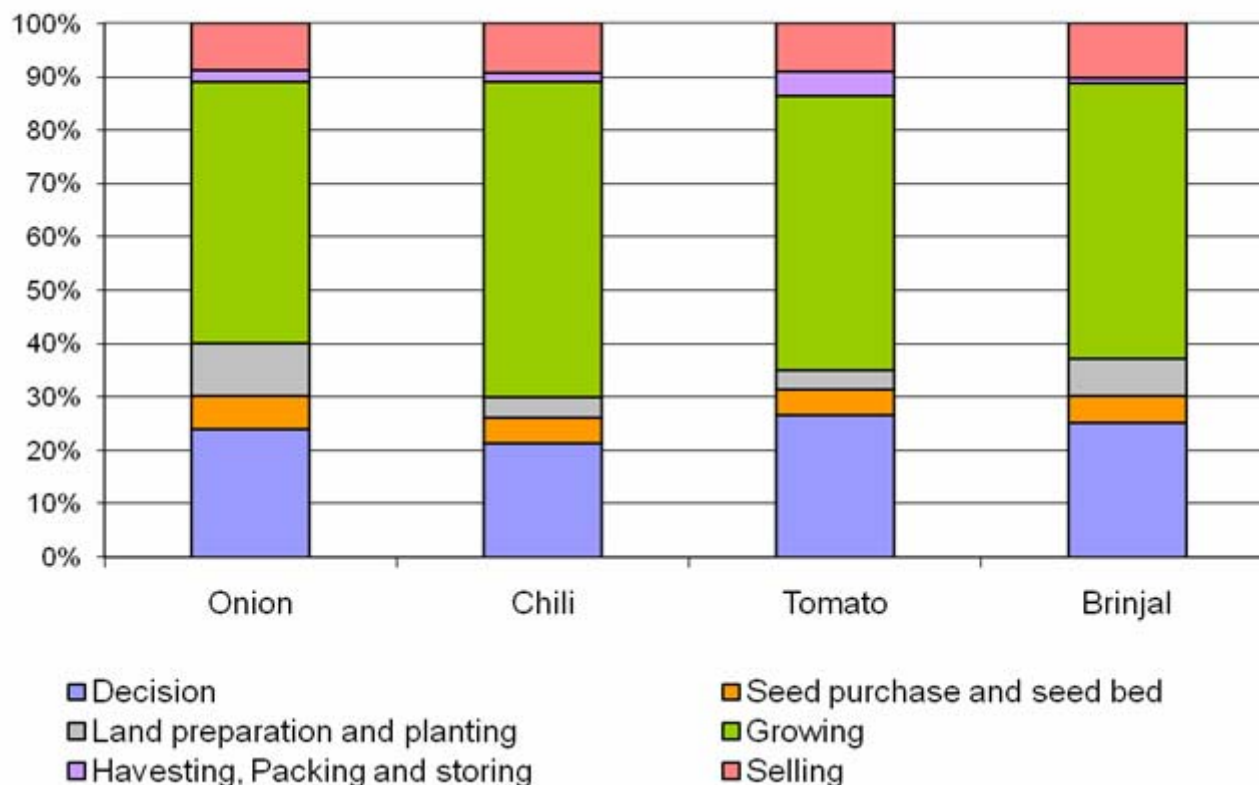
# Growth also has the highest “Cost of Information”

Distribution of Cost of Information by stage of production: all 4 vegetables



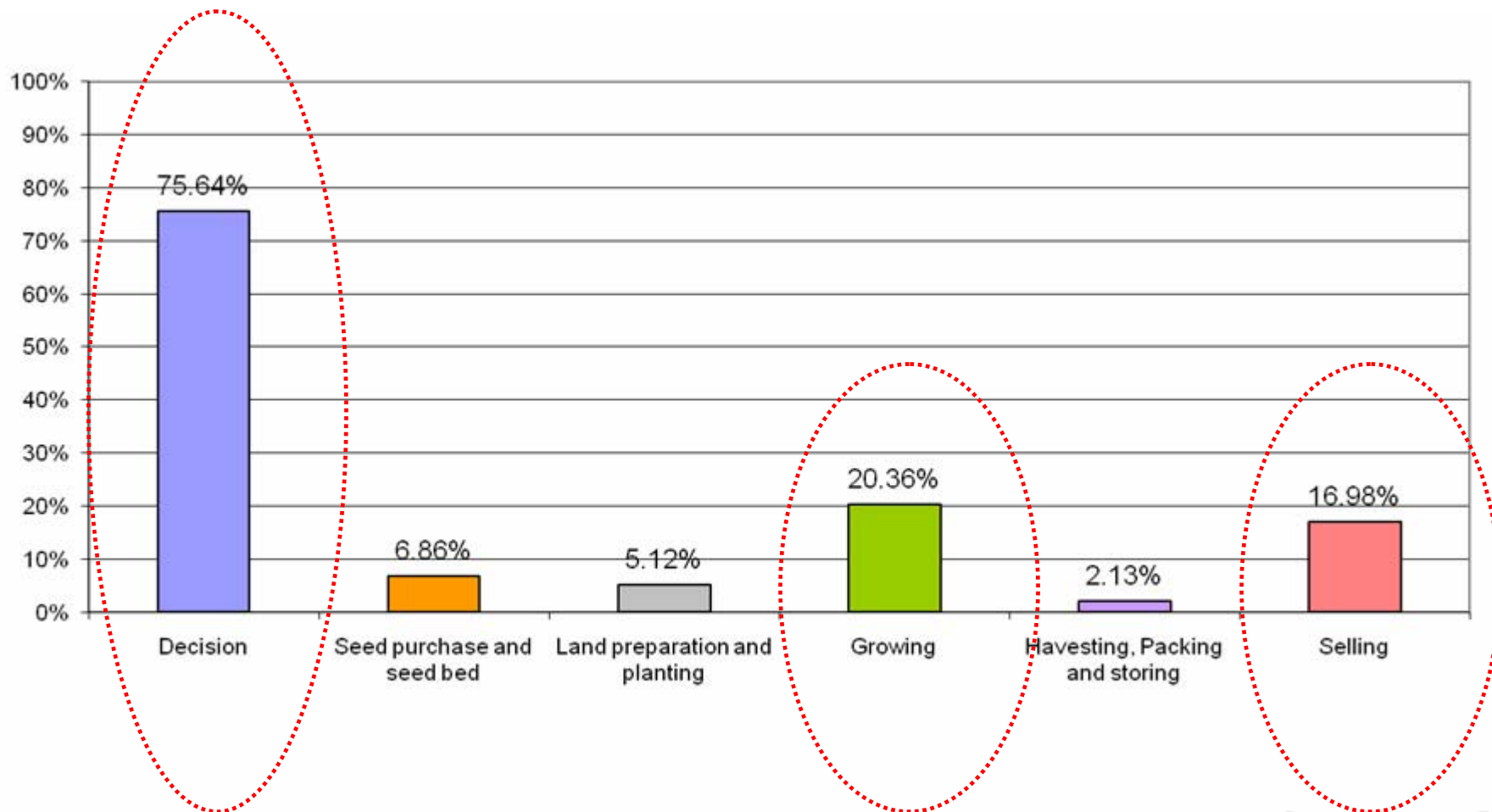
# Growth has highest Cost of Information irrespective of the crop

Distribution of Cost of Information by stage of production, for each type of vegetable

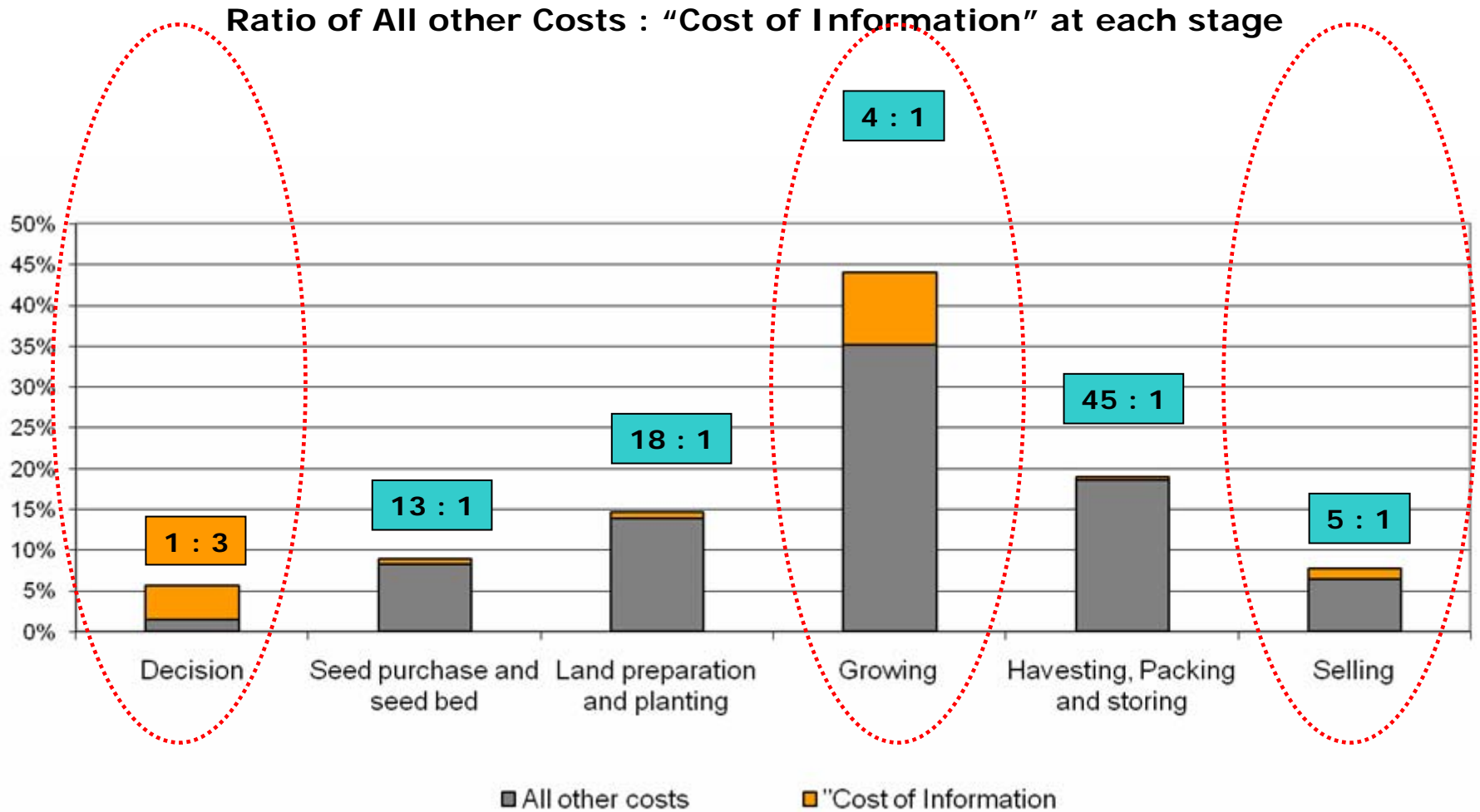


# Decision, Growing & selling stages have a high % cost of information

Cost of Information as % of Total Cost at each stage of production



# Therefore reducing "Cost of Information" at these 3 stages can have high impact

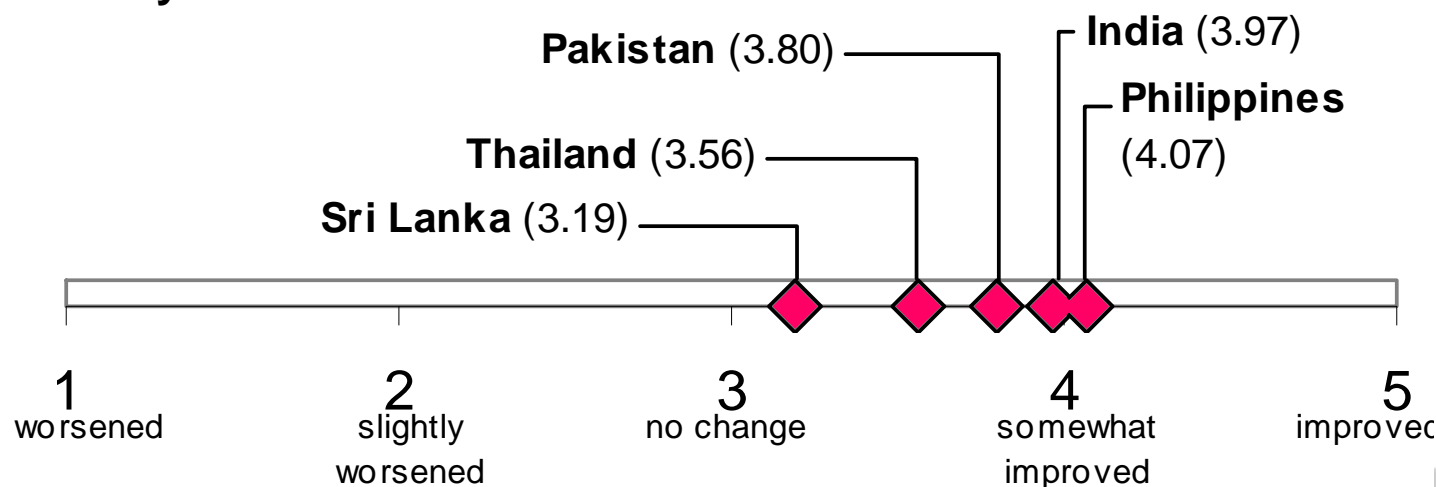


# Use of phones



# Previous data showed Sri Lanka's BOP barely realizing the economic benefits of phones

- Access to phones at Sri Lanka is 92%
- Only 8% of the calls are for business purposes
- Ability to earn or save



# This too shows farmers hardly use phones to find information

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- In our survey, cost of phone calls is only 0.21% of cost of information
- Instead, they travel to find information
  - The average cost of traveling = LKR 195 per visit
  - Average number of visits per season = 24
  - On average they spend LKR 4680 travelling

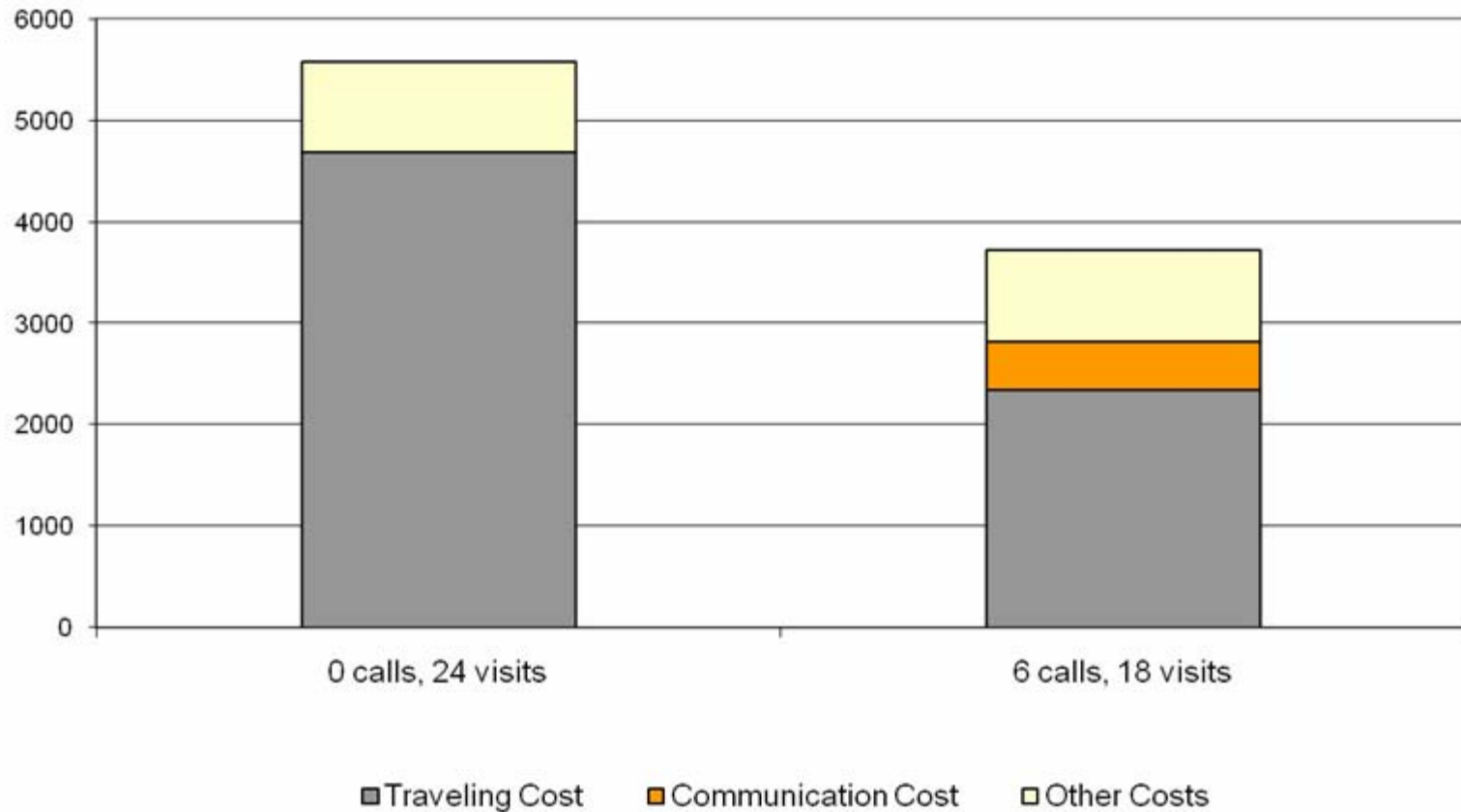


# What if they used the phone more?

- Current – almost 0% use of ICTs
  - Average Cost of traveling to the town – LKR 195
  - Number of visits = 24
  - Total average “cost of information” due to traveling – LKR 4,680
  - Total average cost of information– LKR 5,571
- If ICT use is increased to 50%
  - Assumption : Average cost of a phone call – LKR 40
  - 12 Phone calls & 12 visits (instead of 24 visits and no phone calls)
  - Total average cost of information– LKR 3,714



# A 33% reduction in the cost of information

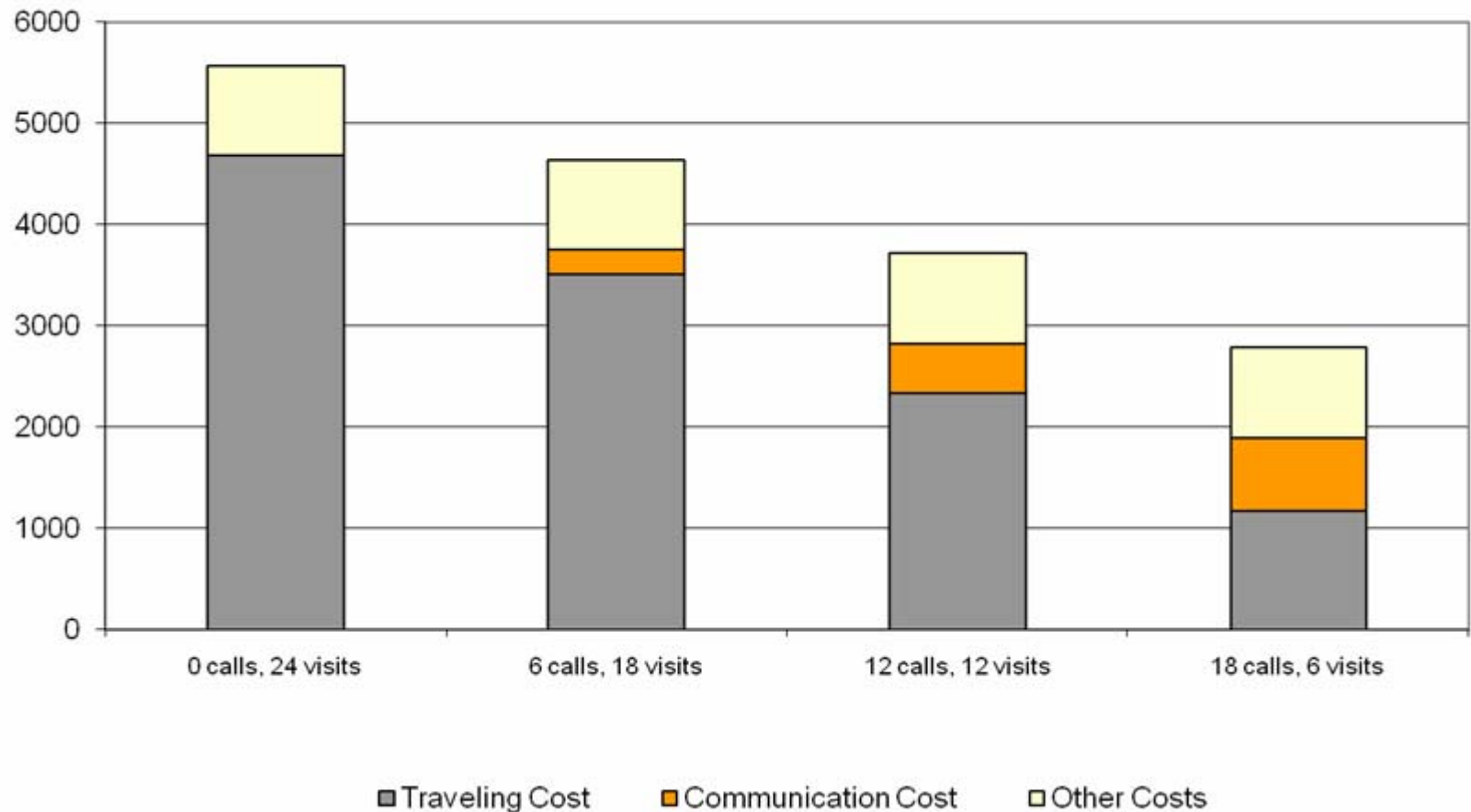


**33% reduction in Cost of information  
(even without accounting for time saved)**



# Depending on the situation, many visits can be replaced by calls

Possible Scenarios: Replacing travel with Phone calls



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> That was an example – in theory.

> Can we do it in practice? i.e. use ICTs to reduce costs, eliminate information asymmetries?

□ Over to Harsha De Silva.....

