

The pit falls and problems of monitoring pit scaling pit emptying processes

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FSM4

**The pit falls and problems of
monitoring pit **scaling** pit
emptying processes**

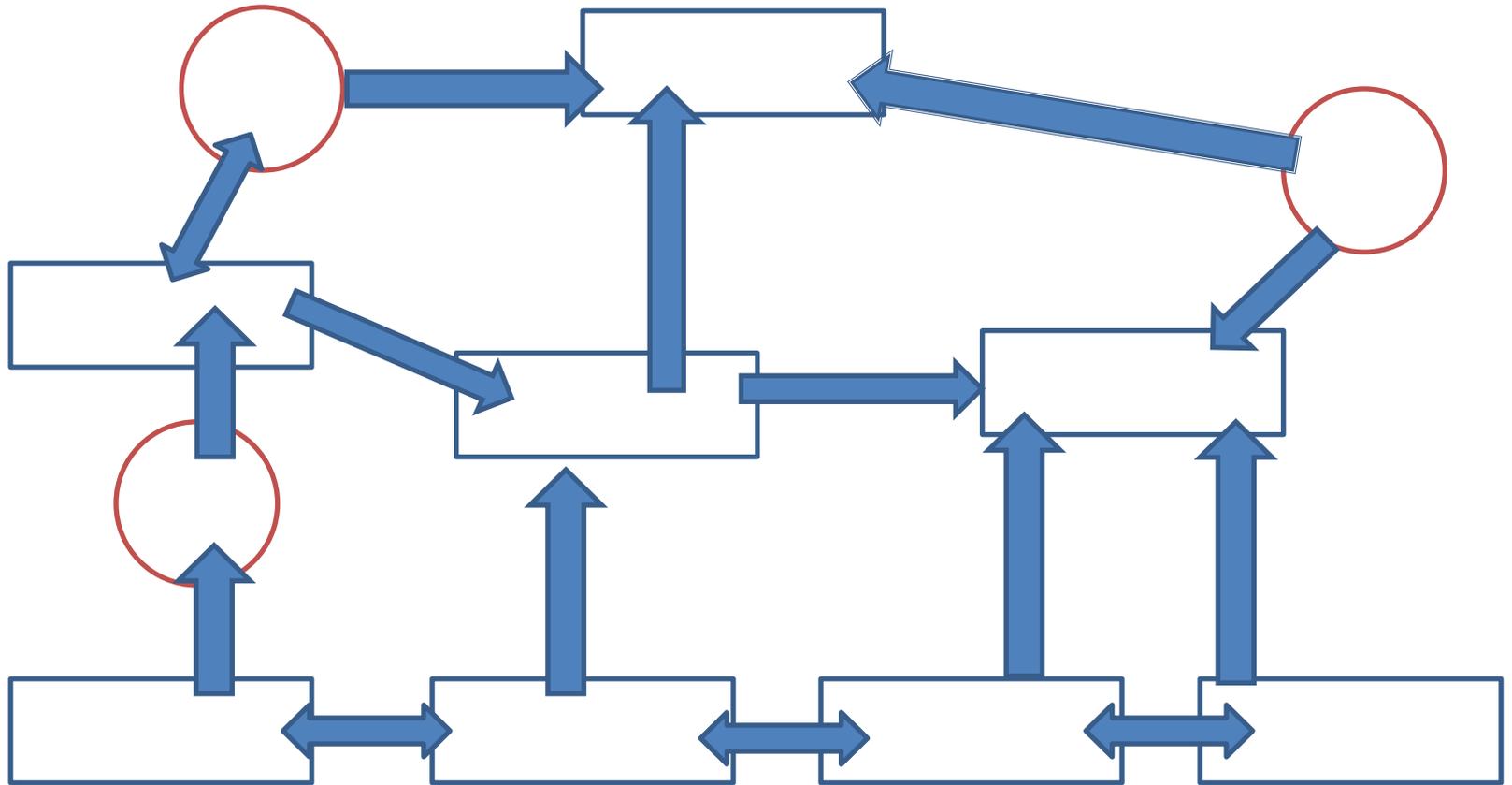
FSM4

General Monitoring Rule Number 1

If the information is not used,
don't collect it.

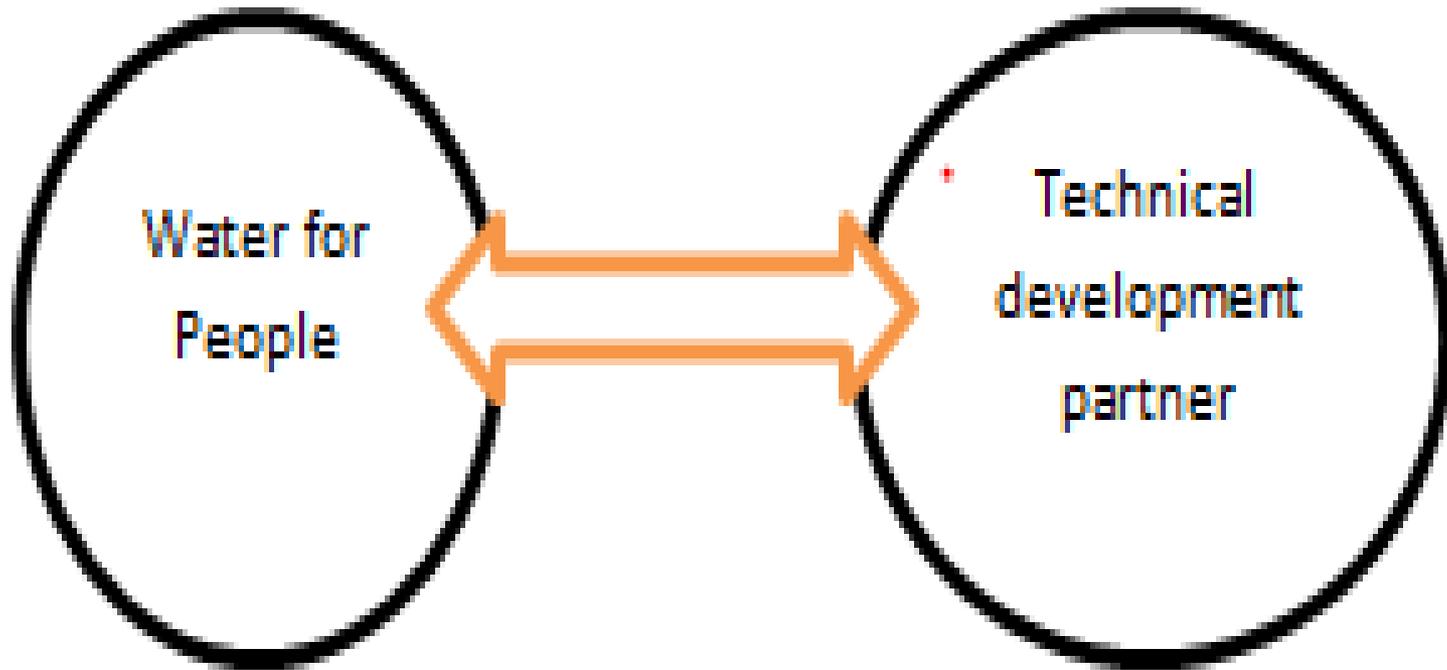
General Rule Number 2

The number of arrows on the monitoring systems diagram is inversely proportional to the likelihood of its success

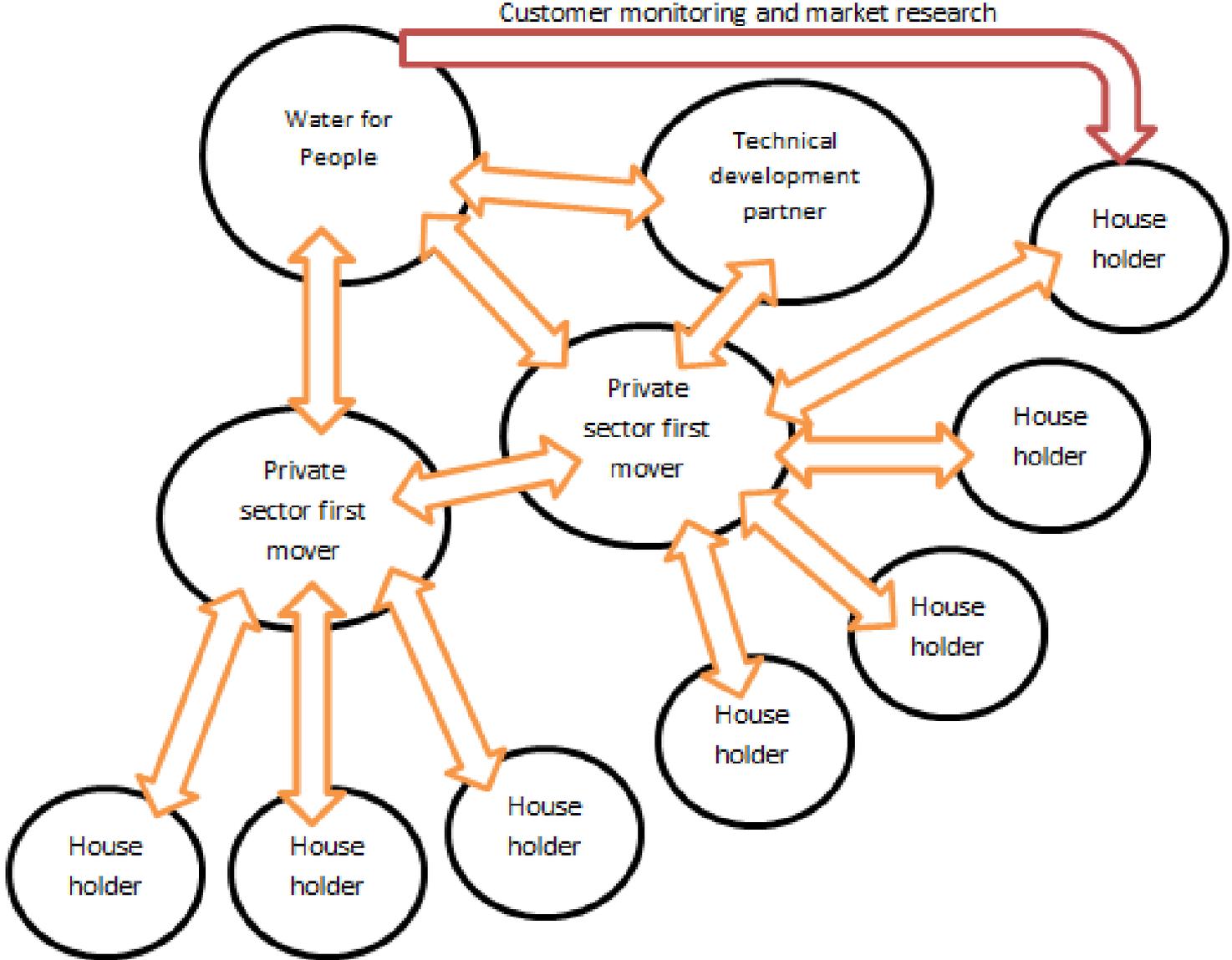


Participatory Integrated Stakeholder System (PISS)

Monitoring in the good old days



Market testing monitoring



Market testing monitoring issues

Asking the companies?

- No value from telling the truth. Why reveal valuable confidential customer data?
- Poor record keeping
- GPS tracking seen as intrusion
- Creates expectation and feelings of dependency

Market testing monitoring household visits?

- Not observable from household visit.
- Households mistrust the evaluators. *“We use a tanker” or “We have never emptied”*
- Poor recall – what can you remember?

- Provides third tier support. Two organizations between facilitator and the householder.
- Play no part of the supply chain
- Improving implementation efficiency Increasing workload and decreasing unit costs
- Facilitating the industry, not individual businesses.
- Encourages new businesses to start up and crowd-in
- Supports and works with government to regulate the 'crowding-in' process
- Lets go of control with a view to finally exiting the sector

Scaling through crowding-in

“The increase in the number of market players started by the first movers within the market”

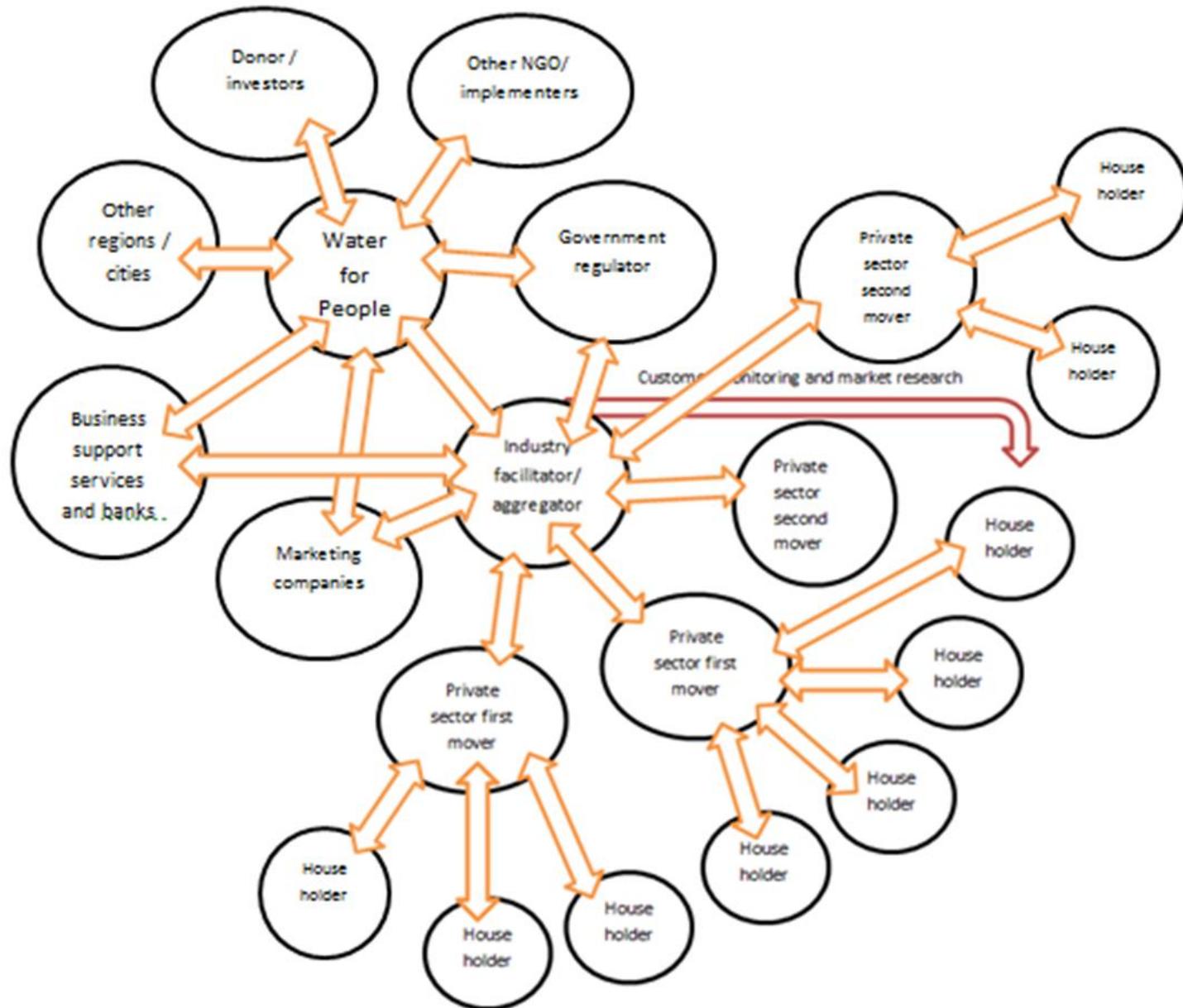
Businesses copying each other.







Scale relationships



Problems are multiplied when scaling

- Accuracy of data question
- cost of collection high
- Value for decision making limited

Need to rethink the approach

Additional problem

We are still clueless about emptying frequencies.

Septic tanks once a year? Why?

No idea of total city needs?

Another problem – Letting Go

Competition rather than collaboration

“These are our entrepreneurs”

Driven by the competition for funds and the desire to be the dominant partner?

Not willing to share data and incompatible systems

Sanitation program efficiency

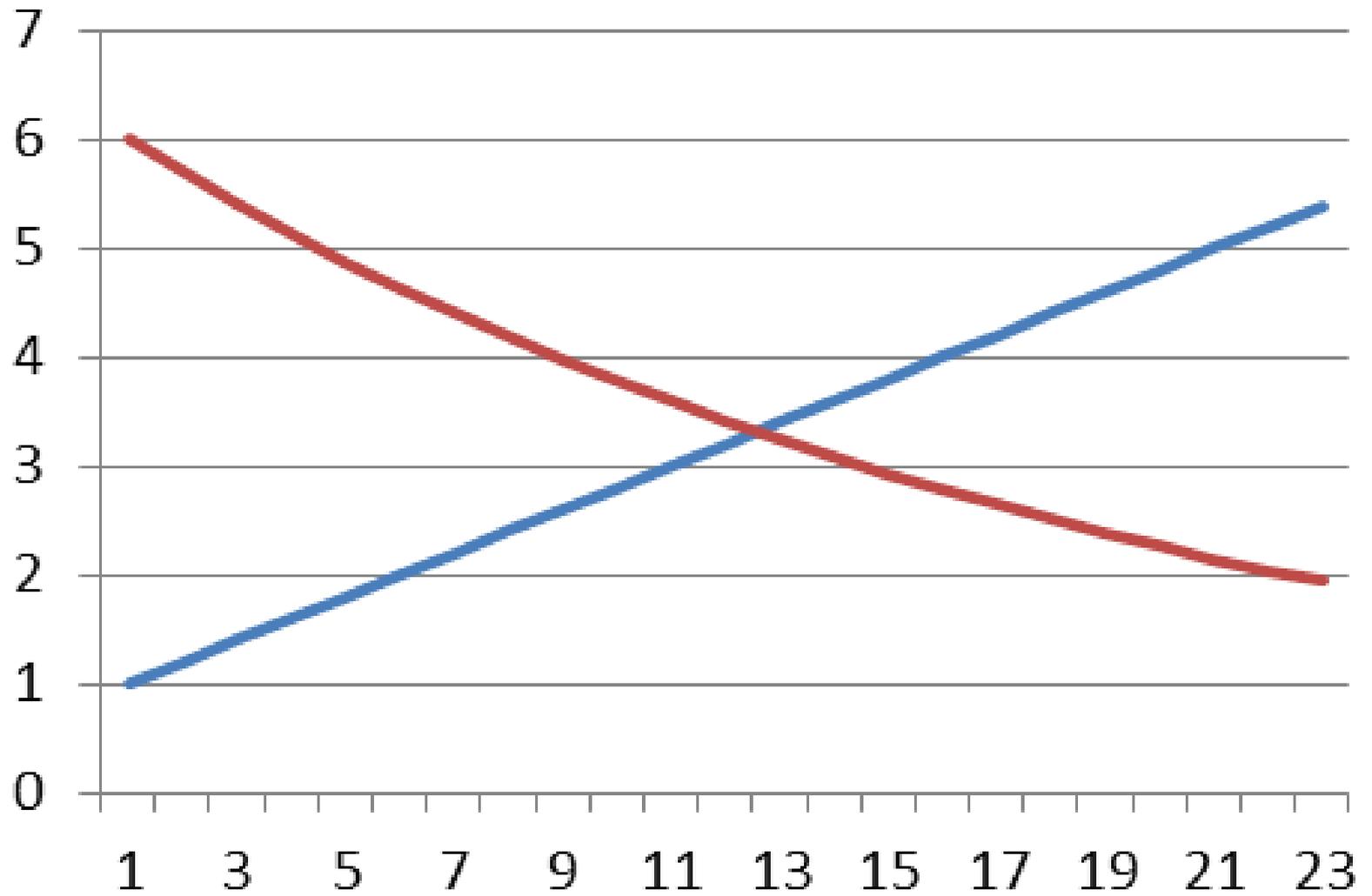
$$= \frac{\text{Money spent by Water for People}}{\text{Number of latrines built or pit emptied}}$$

\$15,000 building 50 latrines = \$300 per latrine

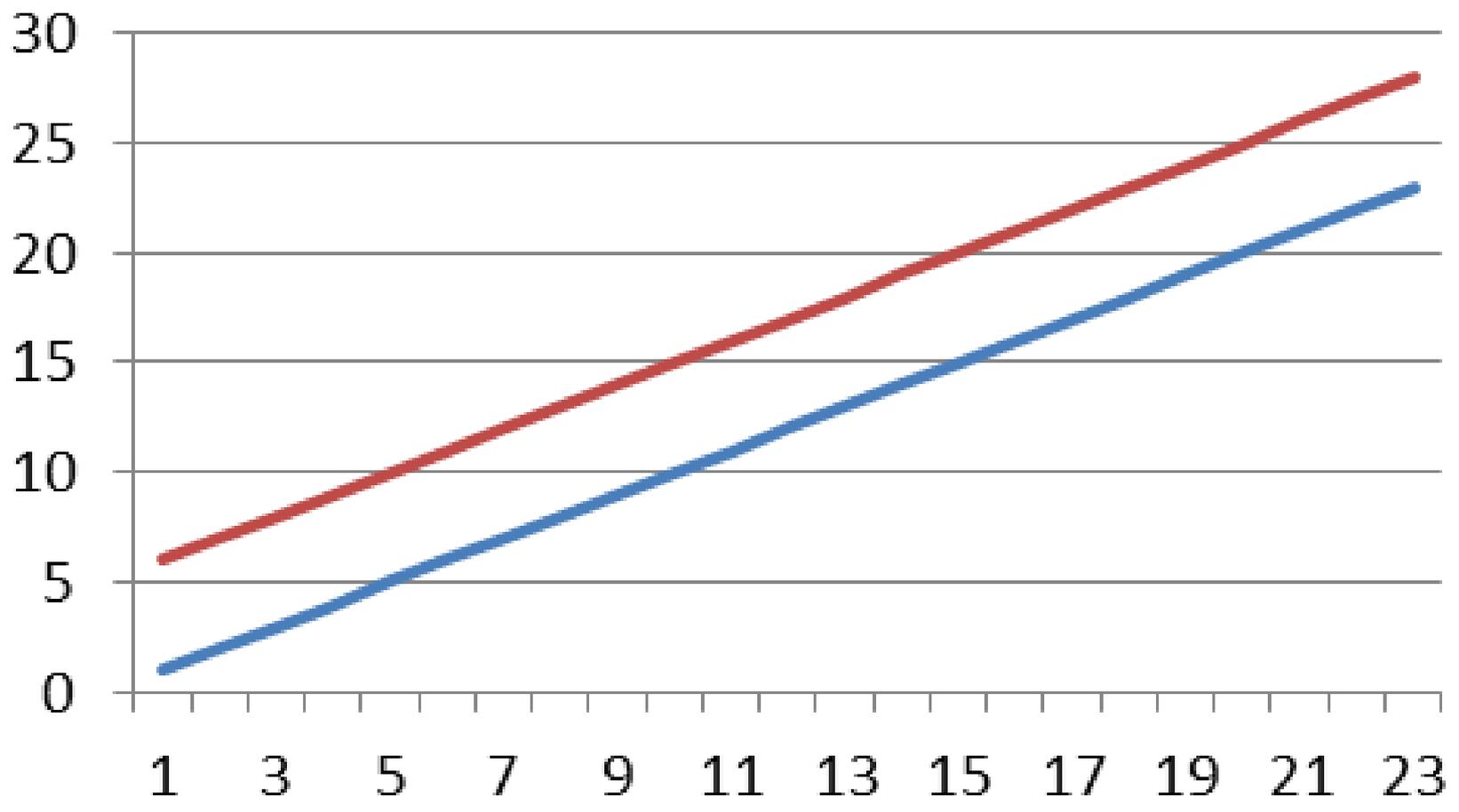
\$15,000 building 500 latrines = \$30 per latrine

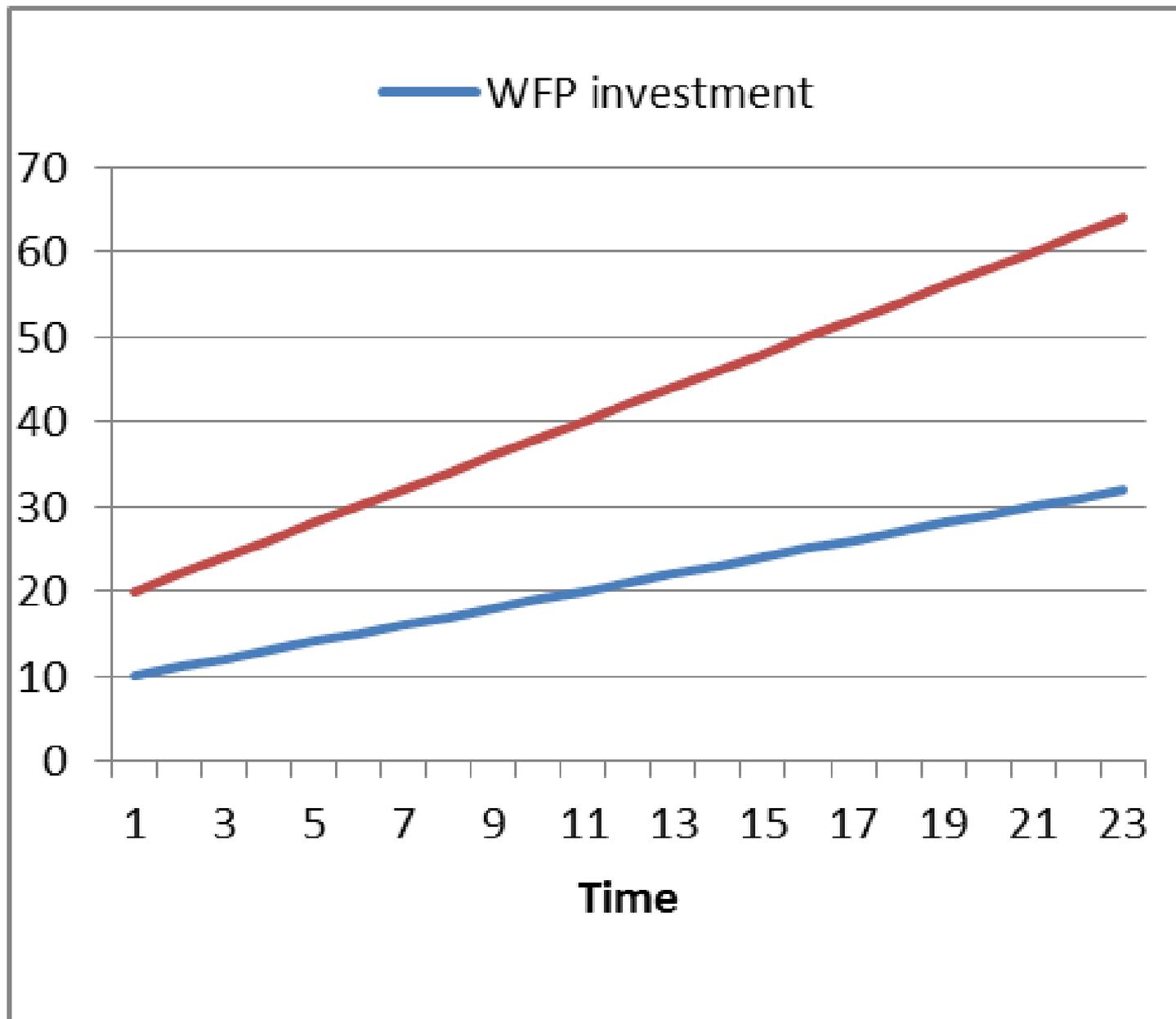
\$15,000 building 5000 latrines = \$3 per latrine

— WFP investment — Pit emptied / latrines built



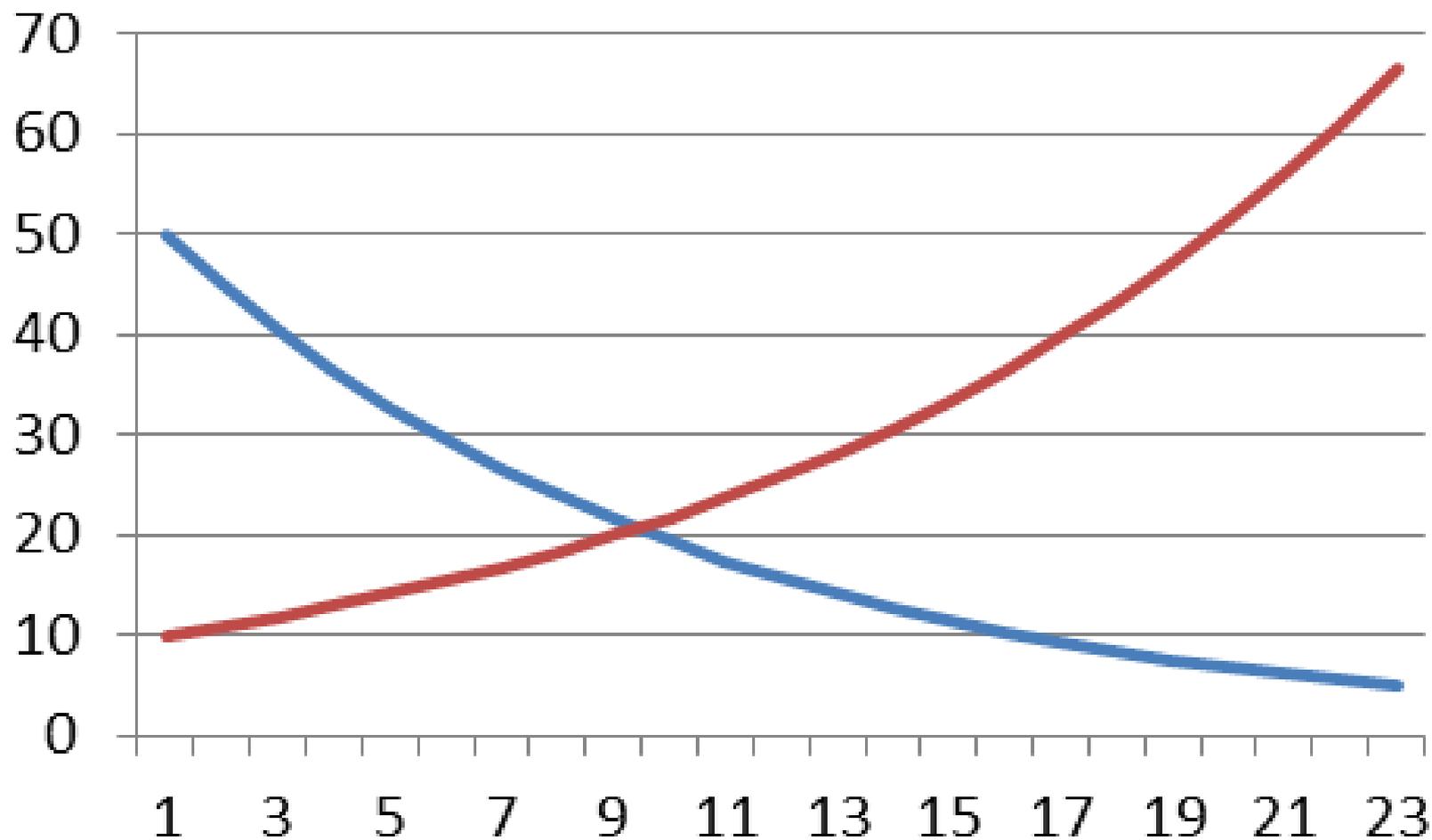
— WFP investment
— Pit emptied / latrines built





— WFP investment

— Pit emptied / latrines built



Efficiency indicator

	Known number of latrines built	Estimated annual number of latrines built	Predicted annual number of latrines built	Total accumulated latrine build	Unit cost to project per latrine
Year 1	960			960	\$ 13.39
Year 2		1300		2260	\$ 5.69
Year 3		1600		3860	\$ 3.33
Year 4			1800	5660	\$ 2.27
Year 5			2000	7660	\$ 1.68

Example: Relationships

<i>Integration</i>	<i>Process</i>	<i>Structure</i>	<i>Purpose</i>
LOW	Communication	Network, round table	Dialogue and common understanding. Clearinghouse for information. Explore common and conflicting interests.
	Contribution	Support group	Mutual exchanges to support each other's efforts. Build mutual obligation and trust.
	Coordination	Task force, council, alliance	Match and coordinate needs, resources, and activities. Limit duplication of services. Adjust current activities for more efficient and effective results.
	Cooperation	Partnership, consortium, coalition	Link resources to help parties achieve joint goals. Discover shared interests. Build trust by working together.
HIGH	Collaboration	Collaborative	Develop shared vision. Build inter- dependent system to address issues and opportunities. Share resources.



Scale monitoring needs

- One City Authority led system.
 - Not a series of independent incomparable INGO systems.
 - City develop relationship with entrepreneurs
 - Voice within city for entrepreneurs
 - Value in providing data
- Encourage higher levels of collaboration
- Sustainable and simple
- Adaptable and suited the situation
- A balance of accuracy against effort

The indicator with poor balance

- Jobs created
- Entrepreneur income
- Profit of businesses
- Volume waste removed by each entrepreneur
- Number of pits emptied
- Location of households with emptied pits

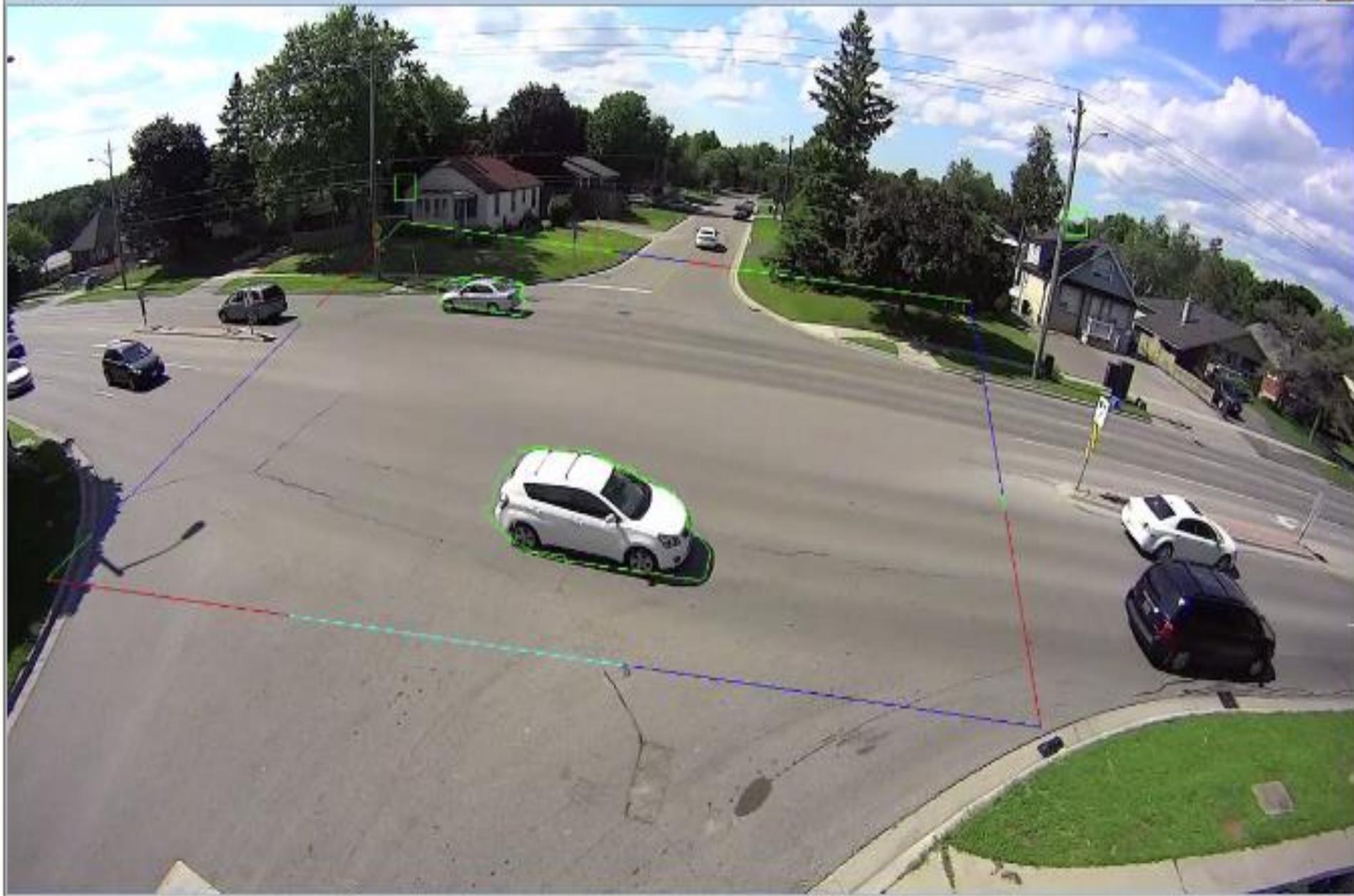
The indicator with good balance

- Efficiency
- Number of companies operating
- Vehicles in regular use
- Total amount dumped at treatment site
- Awareness and intention at household level

HACCP style monitoring







Thank you