Police Performance and Public Perception: The Rajasthan Police Evaluation

By
Nina Singh, IPS
Joint Director, CBI
New Delhi
Introduction

First rigorously evaluated Police reform project in India/World.

3-year collaboration between the Rajasthan Police and the J-PAL, Massachusetts Institute of Technology (USA).

Action: 4 reform initiatives evaluated in 162 police stations, 11 districts:

1. Stability of Tenure
2. Rotation of duties and weekly days off
3. Community Observer
4. Training
Policing Challenges in India

- **Systemic:**
  - Flaws in Criminal Justice System
  - Political interference
  - Lack of community involvement

- **Organizational:**
  - Resource constraint (Manpower/ Budget)
  - Subjective and arbitrary placement
  - Lack of motivation and lack of service orientation

- **Behavioral:**
  - Lack of mutual trust between the police & the public
  - Negative perception of police
  - Attitude of Police personnel
  - Reactive approach – No emphasis on problem solving
Background of Police Reforms

- Police Commissions:
  - Broad, ambitious scope
  - Seldom implemented

- Local initiatives
  - Many success stories
  - Little rigorous evaluation
  - Questions about scalability

Questions:
1. We do not have the ‘counterfactual’.
2. We do not know whether we are better or worse?
3. Last mile problem?

Need for a middle ground:
Pragmatic, effective reforms that can deliver in the short term.
Randomized Control Trials

Like medicine policies/programs are put under rigorous scientific analysis to find out what works and what does not work?

- The eligible ‘subject’ is randomly assigned to two identical groups:
  - Treatment Group
  - Control Group

- Why randomize?
  - Treatment and control groups are similar to each other.
  - Outcomes in control group provide accurate comparison (counterfactual) for measuring impact in treatment group.
Impact: What is it? What is Counterfactual?

- **Primary Outcome**
- **Time**
- **Intervention**
- **Counterfactual**
- **Impact**
Rajasthan: Geographical Location
Rajasthan: Some Facts

- Largest in terms of area: 342,000 sq kms
- Population (2011): 68.6 million
- Strength of Police Force: 85,000 (approx)
- Number of Commissionerates: 2
- Number of police districts: 38
- Number of police stations: 771
- Total Crime Registration: 162957 (2010)*

(*Source: Crime in India 2010)
Timeline:

1. Pre-Pilot: September, 2005
   1. Initial meetings
      - Police Personnel of all ranks
      - Judiciary/Magistracy
      - Media/ Citizens from all social backgrounds
   2. Identification of potential reforms

2. Pilot Stage:
   - Testing of potential reforms in 11 police stations in 3 districts
   - Feedback collection from police station staff

3. Baseline Survey

4. Final rollout of project
   - 162 randomly selected police stations from 11 randomly selected districts
   - One half of staff members randomly selected for training

5. End line Survey

6. Analysis and sharing of Results: January, 2009
Baseline Survey Results:
(1) Crime Reporting

71% crimes never reported

- Major reasons for non-reporting:
  28%: Not an important matter
  20%: Police couldn’t do anything
  17%: Police won’t do anything

- 17% of victims report that police requested some money to register the FIR. (Median demand was Rs. 2000.)
Baseline Survey Results:

(2) Satisfaction with Investigation

Major reasons for dissatisfaction:

- 25%: Police did not take action
- 23%: Police did not seem interested
- 17%: Criminal was not searched or arrested
- 13%: Police was unable to return stolen property
- 6%: Police asked for money
Most people never meet police:

<table>
<thead>
<tr>
<th></th>
<th>Ever interacted with police</th>
<th>Interacted with police in last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>No</td>
<td>89%</td>
<td>92%</td>
</tr>
</tbody>
</table>

Special categories:
- 24% of urban men have interacted with police [17% rural]
- 5% of women have met police

88% of public report that no beat constable ever visits their village or neighborhood
Baseline Survey Results:
(4) Fear of the Police

Do Criminals/Law abiding citizens fear the Police?

- 39% say that law-abiding citizens fear police
- 46% say that criminals fear police
56% of citizens believe that the police don’t work hard, but most think the police are courteous and helpful:
Baseline Survey Results:
(6) Police Opinion

Worst Aspects of Policing

- Boring work
- Poor treatment/disrespect from public
- Poor treatment/disrespect from superiors
- No reward for hard work
- No potential for promotion
- Postings far away from home
- Unsteady/unpredictable postings
- Poor housing quarters
- Low pay
- No day off
- Long working hours

Percentage of respondents who mentioned issue
Criteria of selection

The interventions were selected on the following criteria:

1. Low cost and simple enough to be implemented in any police station.
3. Could be scaled up to all of Rajasthan if successful.

Unit of interventions was chosen to be a police station
Interventions:

1. Stability of Tenure

All administrative transfers frozen in selected police stations for duration of the project.

Transfers permitted for complaints of misconduct.

- **Goal 1: Increased Transparency**
  - Reduce inappropriate interference/ maneuvering for postings

- **Goal 2: Lengthen Posting Periods**
  - Improve service delivery through better knowledge of community and area
Interventions:

2. Weekly Off & Duty Roster:

All staff (except SHO) in selected police stations received a weekly off. All duties assigned to all staff as per previously announced schedule. Duration of duty rotation could vary according to local needs.

- Goal 1: Increase Productivity
  - Better rested, more efficient police force
- Goal 2: Greater Transparency
  - Fewer opportunities for SHO favoritism
- Goal 3: Improve Morale
  - More time off and less burnout due to rotation
Interventions:

3. Community Observer

100+ community members selected to visit police stations for 3 hours each day. Observers learn about police work and can assist if they want.

After the completion of one round of visit, police station staff recruited another round, spreading awareness in community.

- **Goal 1: Community Awareness**
  - Observers witness and spread information about true roles, challenges, and needs of police

- **Goal 2: Police Behavior**
  - Presence of observer encourages polite, patient behavior by staff
Publicity of Community Observer Program

- Every SHO was expected to display a sign publicizing the Community Observer Program in front of the police station.
Community Observer in Action

Sanganer Sadar police station, Jaipur
Interventions:

4. Training:

Selected Investigating Officers received week-long residential training in investigation at Rajasthan Police Academy, emphasizing scientific techniques.

Selected staff of all ranks received 3-day training in communications, public relations, mediation, stress relief, and personal development designed by IL&FS (ETS)*.

- Goal 1: Improve standard of investigation with better training and knowledge
- Goal 2: Improve police-public relationship with better communication skills

* Funded by UN Office on Drugs and Crime (UNODC)
Randomization

- Police stations randomly selected among those not already involved in other initiatives (e.g. ISO certification, model police stations etc)
- Interventions implemented in random sets: Some police stations implemented all 4 interventions, some only one, some none
- Training was randomized at the individual level
- Percentage of staff to be trained randomly determined in police stations
  - Some police stations with 0%, 25%, 50%, 75% or 100% of the staff trained
  - Testing ‘agents of change theory’
Monitoring and Implementation

- Administrative
  - Nodal Officer in the PHQ
  - Nodal officers in the districts

- Random visits to police stations by RAs and Surveyors
  - Interview with SHOs and randomly selected constables to check the status of weekly off/duty rotation
  - Check community observer logbooks
  - Record any transfers

- Decoy visits
The first major independent crime survey in the country
Households chosen randomly from voter list

<table>
<thead>
<tr>
<th>क्रम संख्या</th>
<th>विकास क्षेत्र/प्लेट का नं.</th>
<th>नामांकन का नाम</th>
<th>संबंध</th>
<th>सामर्थ्य का नाम</th>
<th>लिंग</th>
<th>आयु</th>
<th>पहचान पत्र क्र.</th>
<th>अनुभाग संख्या</th>
</tr>
</thead>
<tbody>
<tr>
<td>609</td>
<td>201</td>
<td>किशनाराम</td>
<td>पिता</td>
<td>शिवकरण</td>
<td>पुरुष</td>
<td>41</td>
<td>RJ/25/195/348290</td>
<td>105</td>
</tr>
<tr>
<td>610</td>
<td>201</td>
<td>दादाबेदी</td>
<td>पति</td>
<td>किशनाराम</td>
<td>स्त्री</td>
<td>39</td>
<td>RJ/25/195/348659</td>
<td>11</td>
</tr>
<tr>
<td>611</td>
<td>201</td>
<td>कलाबाबा</td>
<td>पिता</td>
<td>शिवकरण</td>
<td>पुरुष</td>
<td>36</td>
<td>RJ/25/195/348641</td>
<td></td>
</tr>
<tr>
<td>612</td>
<td>201</td>
<td>पाणी</td>
<td>पति</td>
<td>रामनाथ</td>
<td>स्त्री</td>
<td>31</td>
<td>RJ/25/195/348633</td>
<td></td>
</tr>
<tr>
<td>613</td>
<td>201</td>
<td>बायूलाल</td>
<td>पिता</td>
<td>शिवकरण</td>
<td>पुरुष</td>
<td>29</td>
<td>RJ/25/195/348639</td>
<td></td>
</tr>
<tr>
<td>614</td>
<td>201</td>
<td>लीजाबेदी</td>
<td>पति</td>
<td>बायूलाल</td>
<td>स्त्री</td>
<td>27</td>
<td>RJ/25/195/348639</td>
<td></td>
</tr>
<tr>
<td>615</td>
<td>201</td>
<td>रामरामधार</td>
<td>पिता</td>
<td>शिवकरण</td>
<td>पुरुष</td>
<td>22</td>
<td>RJ/25/195/348639</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>क्रम संख्या</th>
<th>विकास क्षेत्र/प्लेट का नं.</th>
<th>नामांकन का नाम</th>
<th>संबंध</th>
<th>सामर्थ्य का नाम</th>
<th>लिंग</th>
<th>आयु</th>
<th>पहचान पत्र क्र.</th>
<th>अनुभाग संख्या</th>
</tr>
</thead>
<tbody>
<tr>
<td>616</td>
<td>201</td>
<td>गिलंदाबेदी</td>
<td>पति</td>
<td>रामरामधार</td>
<td>स्त्री</td>
<td>20</td>
<td>KWJ/1578830</td>
<td></td>
</tr>
<tr>
<td>617</td>
<td>202</td>
<td>जन्वा</td>
<td>पिता</td>
<td>नन्दा</td>
<td>पुरुष</td>
<td>71</td>
<td>RJ/25/195/348144</td>
<td></td>
</tr>
<tr>
<td>618</td>
<td>202</td>
<td>लालीदेबी</td>
<td>पति</td>
<td>बंबा</td>
<td>पुरुष</td>
<td>66</td>
<td>RJ/25/195/348248</td>
<td></td>
</tr>
<tr>
<td>619</td>
<td>202</td>
<td>हनुमान</td>
<td>पिता</td>
<td>बंबा</td>
<td>पुरुष</td>
<td>51</td>
<td>RJ/25/195/348145</td>
<td></td>
</tr>
<tr>
<td>620</td>
<td>202</td>
<td>हिमनाराम</td>
<td>पति</td>
<td>हनुमान</td>
<td>स्त्री</td>
<td>49</td>
<td>RJ/25/195/348283</td>
<td></td>
</tr>
<tr>
<td>621</td>
<td>202</td>
<td>कलरा</td>
<td>पिता</td>
<td>बंबा</td>
<td>पुरुष</td>
<td>46</td>
<td>RJ/25/195/348429</td>
<td></td>
</tr>
<tr>
<td>622</td>
<td>202</td>
<td>गौतारीदेबी</td>
<td>पति</td>
<td>कलरा</td>
<td>स्त्री</td>
<td>44</td>
<td>RJ/25/195/348643</td>
<td></td>
</tr>
<tr>
<td>623</td>
<td>202</td>
<td>गोरी</td>
<td>पिता</td>
<td>बंबा</td>
<td>पुरुष</td>
<td>41</td>
<td>RJ/25/195/348113</td>
<td></td>
</tr>
<tr>
<td>624</td>
<td>202</td>
<td>केसरेदेबी</td>
<td>पति</td>
<td>गोरी</td>
<td>स्त्री</td>
<td>39</td>
<td>RJ/25/195/348674</td>
<td></td>
</tr>
<tr>
<td>625</td>
<td>203</td>
<td>भवराम</td>
<td>पिता</td>
<td>हीरराम</td>
<td>पुरुष</td>
<td>56</td>
<td>RJ/25/195/348003</td>
<td></td>
</tr>
<tr>
<td>626</td>
<td>203</td>
<td>कमलीदेबी</td>
<td>पति</td>
<td>भवराम</td>
<td>स्त्री</td>
<td>54</td>
<td>RJ/25/195/348249</td>
<td></td>
</tr>
<tr>
<td>627</td>
<td>203</td>
<td>हुमराम</td>
<td>पिता</td>
<td>हीरराम</td>
<td>पुरुष</td>
<td>53</td>
<td>RJ/25/195/348002</td>
<td></td>
</tr>
</tbody>
</table>

Total: 22,773 households interviewed in two rounds
Impact of Interventions

Effect of Interventions on Victim Satisfaction

- Additional Combined Effect
- No Transfer
- Weekly Off/Duty Rotation
- Community Observer
- Effect of Training
Impact: No Transfer

Implementation Status

- Percentage of Staff transferred over approximately 10 months of the reform program:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Treatment (No Transfer)</th>
<th>Control</th>
<th>Difference:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspector</td>
<td>49%</td>
<td>64%</td>
<td>15%</td>
</tr>
<tr>
<td>Sub. Inspector</td>
<td>48%</td>
<td>68%</td>
<td>20%</td>
</tr>
<tr>
<td>Asst. Sub. Insp.</td>
<td>28%</td>
<td>30%</td>
<td>2%</td>
</tr>
<tr>
<td>Head Constable</td>
<td>28%</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td>Constable</td>
<td>17%</td>
<td>30%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Impact

- Significant reduction in staff transfers is possible, but full freeze in transfers remains a challenge.
- Increased victim satisfaction by 30% than the control PS
- Decreased fear of police by 19%
- Reduced staff complaints of unfairness
Implementation Status:

- The training was reasonably well implemented.

Impact:

- Victim satisfaction increased from 27% to 58% (more than doubled).
- Cases investigated by the trained IOs were graded 13% higher in standards on the scale of 1-10.
- Improvement in documentation and use of scientific techniques in the collection of evidence.
Higher the proportion of police staff trained, the greater the satisfaction of crime victims.
Impact: (Training) Police Response

- Two sources of difference:
  - Trained police took more actions (more arrests, more interviews with witnesses, more evidence collected)
  - In addition to tangible actions, satisfaction increased due to intangible effects of training on police attitudes
Controlling for other factors, each previous decoy visit increased the probability of FIR registration by 8%.
Impact: Independent Crime Survey closer to the reality

- Independent Crime Survey reflects crime status better than Police Station registration of crime

- Survey does not cover victimless crimes—gambling, drug use, etc.
- Survey cannot distinguish cognizable, non-cognizable crimes
Days off increased, but never became weekly. At the end line (March 2008), 28% of weekly off staff had a day off in the last 7 days, versus 26% in the control—statistically indistinguishable.

**Impact**

- Increased **police staff satisfaction** by 3%
Impact: (Community Observer)
No perceptible impact

Implementation

- According to official records remained roughly constant in implementation:

But, many repeat visitors. Further, serious concerns about accuracy of records—40% of visitor books appear to be filled out by police staff themselves.
Policy Recommendations: Action Taken

- **Periodic independent National Crime Survey**
  - Evaluate crime reduction strategies
  - Improve incentives for better policing

- **Stability of Tenure**
  - Demonstrated evidence on public perception
  - Incorporated in the new Rajasthan Police Act

- **Training**
  - Demonstrated substantial effect on victim satisfaction
  - Expanded to rest of the staff of Rajasthan Police
  - Incorporated in training curriculum of Rajasthan Police

- **Weekly Off**
  - Small impact, can be implemented better
  - Increase in the strength of staff in police stations

No Evidence on Community Observer/ Decoy can be integrated?
Challenges

- General “resistance” at the level of SHOs
  - More work, no immediate benefit
  - Constraint of manpower/ resources
  - No incentive
  - Low Priority
- Frequent transfers of supervisory officers
- External Interferences
- Unforeseen externalities
  - Massive Caste Agitation (Gujjar-Meena)
  - Terror Bomb Blast in Jaipur/ Ajmer
- Lack of buy in by leadership
Conclusion

- Police is **NOT** resistant to change
- Simple/ cost-effective initiatives **CAN** improve police performance
- Public Opinion **CAN** be affected in short term
- Evidence based initiative is **POSSIBLE** in the Government to guide policies
The Way Forward: Road Accidents and Modern Technology

- **An old problem**
  Road accidents killed more than 9100 people in Rajasthan in 2010, and injured more than 31,000.

- **A modern solution**
  Our initiative is India’s first rigorous evaluation of the use of 2 modern technologies in policing:
  - Breath analyzer devices
  - GPS monitoring

- Collaboration between Rajasthan Police and Massachusetts Institute of Technology (USA).

- Program conducted in 183 police stations across 11 police districts:
Three Main Questions

1. Are checkpoints with breath analyzers effective in reducing road accidents and deaths?

2. **Which personnel** should carry out checkpoints?
   - Normal thana staff
   - Dedicated staff

3. **Which locations** should the police target for drunken driving checkpoints?
   - Always at the best location to catch drunks
   - Alternate locations to maintain element of surprise
Key Results

- **Overall Results**
  - Small effects during program period – max 15% reduction in deaths at night
  - Larger effects on all outcomes *after* the program

- **Lines vs. Thanas:** Dedicated Police Lines teams have higher attendance and checking rates.

- **Fixed vs. Surprise:** Surprise maybe better, but sample too small to be certain.

- **Frequency of checkpoints:** Effectiveness highest at 3 checkpoints per week (in one thana area).
THANK YOU!