The Impact of CDD: Evidence from Sierra Leone

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Why evaluate Community Driven Development?

• CDD supports investment and promotes participation by giving grants to communities who decide how to spend based on participatory process

• Aim is investment that better meets needs and better institutions as people learn to be more participatory

• Concern of elite capture and lack of capacity to implement projects
Why evaluate CDD? II

• An estimated 9% or World Bank lending
  – Criticism of lack of rigorous evidence for CDD (Mansuri and Rao, 2004)
  – This study part of concerted effort to generate evidence

• How to build better institutions?
  – Countries with better institutions perform better
  – Participation important in its own right
  – Little good evidence on how to get from here to there
  – CDD is one of the main ways international community seeks to build more democratic institutions currently
Other literature on CDD

- Labonne and Chase, 2008, Philippines
  - Propensity score matching and panel data on WB funded project
  - Increased participation in village meetings, interaction between village leaders and residents, trust in strangers
  - CDD may substitute for other forms of social capital (eg groups)

- Voss, 2008, Indonesia
  - Flagship Kecamatan Development Project
  - Propensity score matching, outcomes welfare and access to service
  - No overall impact on consumption, but redistribution from richer to poorer
  - Despite focus on women, negative effects on women headed hh
  - Improvement in health access reduced unemployment, no change on schooling

- Fearon, Humphreys and Weinstein, 2009, Liberia
  - Randomized evaluation (like ours), no full academic version out yet
  - IRC Community Driven Reconstruction project
  - No improvement in public goods, income, generation, ability to affect decisions, acceptance of marginalized groups, transparency
  - In game, displaced people more willing to give to public good
Background on Sierra Leone

- Sierra Leone ranks 180th out of 182 countries on the UN Human Development Index
- Emerging from 10 year civil war (1991-2002)
- Very strong traditional systems of authority
  - Many public services are provided through local collective action including community teachers, road maintenance, community farms
- Some argue war was fuelled by lack of voice of youth
  - War was not on ethnic lines
  - Youth and women have less say in the provision of goods but youth are the ones who provide the labor
- Local councils re-established in 2004 after 30 years
Highlights of the GoBifo Evaluation

• Randomized evaluation of pilot CDD
  – World Bank funded project implemented by Institutional Reform and Capacity Building Project of Government of Sierra Leone, Royal Tropical Institute (KIT) worked on the design of the program

• Large sample size
  – Precise estimates

• Four years between project start and endline

• Extensive survey and nonsurvey measures of impact on public goods, economic outcomes, participation, elite capture
GoBifo: Project objectives and description

- To “strengthen social capital by enhancing the capacity of villages and local governments to design and implement strategic development plans at village and ward levels”
  - Improve welfare, provide more public goods, in a way that reflects the needs of marginalized
  - Strengthen ability of communities to continue with these plans post GoBifo
  - Encourage more participatory approaches to decision making even outside GoBifo

- Intervention at community and ward level
  - Only community level aspect was evaluated

- Communities given $4,700 in grants over 3 rounds

- Facilitators worked with 6 communities (lived in one)
  - Helped communities reestablish VDC, set up bank accounts
  - Helped communities identify priorities draw up VDP in a participatory way and helped with implementation
  - Encouraged participatory approach to throughout
GoBifo evaluation sites

- Freetown
- Bonthe
- Bombali

• 118 communities randomized to get CDD, 118 control (in Bonthe and Bombali)
Project and Evaluation Timeline
GoBifo: Distribution of sub-projects by type
Measuring Impact of GoBifo

• **Surveys:** hh surveys, opinion leaders surveys
  – Developed from extensive focus group work and field testing to adapt to local context
  – Asked about specific actions, rather than general feelings

• **Gift choice experiment:** Communities presented with choice of two gifts for taking part in survey—many bags of salt or carton of batteries
  – Documented how decision was made
  – Roughly half communities chose each, so a real choice

• **Building materials vouchers:** Communities received 6 vouchers could be redeemed (with co-pay) at local store.
  – Max subsidy US$100 with community co-pay of US$200
  – Counted coupons redeemed, knowledge of vouchers etc

• **Tarpaulin:** left each community with one tarp (heavy plastic sheeting) to use as they saw fit.
  – Months later, returns and saw how tarp being used, whether everyone benefits equally or elite capture
Table 2: Summary of Results by Hypothesis

<table>
<thead>
<tr>
<th>Realm of Impacts</th>
<th>Hypothesis</th>
<th>Core Mean Effects Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family A: Project Implementation</td>
<td>H1. GoBifo creates functional local institutions</td>
<td>0.552** (0.060)</td>
</tr>
<tr>
<td></td>
<td>H2. GoBifo increases the quality and quantity of local public services infrastructure</td>
<td>0.130** (0.036)</td>
</tr>
<tr>
<td>Family B: Proximate Impacts or “Hardware” Effects</td>
<td>H3. GoBifo improves general economic welfare</td>
<td>0.272** (0.042)</td>
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<td></td>
<td>H4. GoBifo enhances trust</td>
<td>0.042 (0.065)</td>
</tr>
<tr>
<td></td>
<td>H5. GoBifo increases collective action and contributions to local public goods</td>
<td>0.041 (0.040)</td>
</tr>
<tr>
<td></td>
<td>H6. GoBifo builds groups and networks</td>
<td>0.027 (0.043)</td>
</tr>
<tr>
<td></td>
<td>H7. GoBifo increases access to information about local governance</td>
<td>0.004 (0.039)</td>
</tr>
<tr>
<td></td>
<td>H8. GoBifo enhances inclusion and participation in community decisions, especially for vulnerable groups</td>
<td>-0.006 (0.029)</td>
</tr>
<tr>
<td></td>
<td>H9. GoBifo increases participation in local governance</td>
<td>0.131** (0.047)</td>
</tr>
<tr>
<td></td>
<td>H10. GoBifo reduces crime and conflict</td>
<td>0.030 (0.055)</td>
</tr>
<tr>
<td></td>
<td>H11. GoBifo changes local systems of authority</td>
<td>0.048 (0.036)</td>
</tr>
<tr>
<td></td>
<td>H12. GoBifo fosters more liberal political and social attitudes</td>
<td>0.033 (0.042)</td>
</tr>
</tbody>
</table>
### Distribution of Baseline Characteristics across Treatment and Control Areas

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Treatment Mean</th>
<th>Control Mean</th>
<th>T - C Difference</th>
<th>Standard Error</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community characteristics</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Total households in the community</td>
<td>47.263</td>
<td>46.763</td>
<td>0.500</td>
<td>4.027</td>
<td>234</td>
</tr>
<tr>
<td>Distance to nearest motorable road</td>
<td>2.673</td>
<td>2.991</td>
<td>-0.318</td>
<td>0.398</td>
<td>234</td>
</tr>
<tr>
<td>Conflict experienced during the war (index of 10)</td>
<td>0.671</td>
<td>0.679</td>
<td>-0.009</td>
<td>0.025</td>
<td>234</td>
</tr>
<tr>
<td>Historical incidence of domestic slavery</td>
<td>0.398</td>
<td>0.364</td>
<td>0.034</td>
<td>0.063</td>
<td>234</td>
</tr>
<tr>
<td>Demographics and household characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proportion of households engaged in farming</td>
<td>0.815</td>
<td>0.828</td>
<td>-0.013</td>
<td>0.015</td>
<td>2,786</td>
</tr>
<tr>
<td>Proportion of households belonging to a ruling family</td>
<td>0.255</td>
<td>0.253</td>
<td>0.002</td>
<td>0.017</td>
<td>2,776</td>
</tr>
<tr>
<td>Household size</td>
<td>8.917</td>
<td>8.314</td>
<td>0.603*</td>
<td>0.176</td>
<td>2,744</td>
</tr>
<tr>
<td>PCA of household assets</td>
<td>0.057</td>
<td>-0.056</td>
<td>0.113*</td>
<td>0.052</td>
<td>2,743</td>
</tr>
<tr>
<td>Proportion of female respondents</td>
<td>0.492</td>
<td>0.474</td>
<td>0.018</td>
<td>0.019</td>
<td>2,797</td>
</tr>
<tr>
<td>Proportion of youth (&lt;36 years old) respondents</td>
<td>0.534</td>
<td>0.533</td>
<td>0.001</td>
<td>0.019</td>
<td>2,790</td>
</tr>
<tr>
<td>Respondent's years of education</td>
<td>1.760</td>
<td>1.651</td>
<td>0.109</td>
<td>0.118</td>
<td>2,739</td>
</tr>
<tr>
<td>Local public goods and collective action</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock of local public goods (index of 7)</td>
<td>2.322</td>
<td>2.136</td>
<td>0.186</td>
<td>0.198</td>
<td>234</td>
</tr>
<tr>
<td>Presence of a communal farm</td>
<td>0.431</td>
<td>0.421</td>
<td>0.010</td>
<td>0.065</td>
<td>228</td>
</tr>
<tr>
<td>Presence of a Village Development Committee (VDC)</td>
<td>0.617</td>
<td>0.547</td>
<td>0.070</td>
<td>0.065</td>
<td>230</td>
</tr>
<tr>
<td>Attendance at community meeting in the past year</td>
<td>0.688</td>
<td>0.697</td>
<td>-0.009</td>
<td>0.017</td>
<td>2,786</td>
</tr>
<tr>
<td>Social capital, participation in governance, conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have trusted a neighbor to sell own goods at market</td>
<td>0.817</td>
<td>0.810</td>
<td>0.007</td>
<td>0.015</td>
<td>2,778</td>
</tr>
<tr>
<td>Group membership (index of 5)</td>
<td>2.173</td>
<td>2.210</td>
<td>-0.037</td>
<td>0.042</td>
<td>2,797</td>
</tr>
<tr>
<td>Correctly names year of upcoming general election</td>
<td>0.197</td>
<td>0.200</td>
<td>-0.003</td>
<td>0.015</td>
<td>2,787</td>
</tr>
<tr>
<td>Reported voting in the previous Presidential election</td>
<td>0.881</td>
<td>0.890</td>
<td>-0.009</td>
<td>0.012</td>
<td>2,788</td>
</tr>
<tr>
<td>Had a conflict over money during the past year</td>
<td>0.214</td>
<td>0.234</td>
<td>-0.019</td>
<td>0.016</td>
<td>2,791</td>
</tr>
</tbody>
</table>
Results: project implementation

• Around 90% established Village Development Committees, bank accounts village plans

• Benefits of GoBifo widely enjoyed
  – 90% HH said benefited directly
  – 83% contributed (mainly unskilled labor)
  – 43% said everyone helped key decisions (38% said big ones alone)
  – 95% could name one GoBifo project
  – 10% could name specific amount of GoBifo grant

• Very low levels of leakage
  – Of 273 financial transactions, communities could not confirm receipt in 13.5% of cases
    • Communities recorded different amount
    • Communities said they received materials not cash
    • Recall issues likely to account for much of this
    • GoBifo staff have revised procedures to deal with any potential issues
Results: Public goods, economic

- Increase in number of public goods by 0.13 SD
  - TBA huts 18ppt, community center 24ppt, latrine 17ppt, seed bank 17ppt, soccer uniforms 10ppt

- Improve quality of public goods 0.3 SD
  - Increased utilization of latrines and drying floors

- No increase in community contributions to public goods, less likely to contact NGO for help

- Household assets, entrepreneurship, market activities 0.27 SD
  - Number of petty traders and goods on sale
  - Household assets
  - Skills training
Results: social capital and participation

• Trust: 12 measures all but one insignificant

• Collective action
  – Note, communities did contribute to GoBifo, evaluation tested whether this extended beyond GoBifo
  – Survey measures show no change in contributions to nonGoBifo
  – 62 treatment and 64 control villages responded to the building material voucher program

• Groups, cooperation
  – No difference in survey measures or group membership or group activity

• Participation
  – 72 measures, only 6 significant
  – No more women spoke up in the meeting to chose batteries or salt in GoBifo than nonGoBifo

• Participation/linkage local govt increased
  – VDCs, VDPs, traditional leaders more involved, better view of LCs
Why the difference with Liberia results?

• SL finds hardware (economic effects) but not changes in software (how people interact), Liberia study finds opposite

• But are the differences as big as they seem?

• SL and Liberia find more public goods

• Liberia finds economic welfare close to significant and smaller sample size

• Liberia finds more trust in village leaders, SL more trust in local councilors

• Two areas of differences

• Liberia finds more contributions to collective action, SL less
  – Liberia effect all comes from displaced and outsiders, SL has fewer

• Liberia finds more participation SL does not
  – not a major focus of Liberia, attendance measures not participation
  – major focus in SL, focus on participation
Conclusion

• GoBifo was successful in improving level of public goods and economic outcomes
  – Could have been because of participation, not possible to say for sure
• Participation in and benefits from GoBifo were widely shared
• Absolute levels of trust, collective action high, participation of marginalized groups low
• No evidence that GoBifo increased trust, collective action, or changed the way decisions were made outside GoBifo
• Is 4 years too short a time period to change institutions?
  – Typical timescale for these type of projects
  – Quotas for women and voting campaigns have generated important changes in similar time scales
• Raises questions about whether we (as outsiders) know how to make local institutions more participatory in an effective way. Is this type of grass routes facilitation our comparative advantage?