Design

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I. The Rationale
The Rationale: Open Data for Monitoring

• Global and regional evidences highlight the need of producing and sharing internationally comparable data for monitoring of global and national targets including the SDGs.

• Open data helps in tracking progress, taking evidence-based decisions for effective policy making and implementation, and also to observe transparency and strengthen accountability of the land actors and institutions.

• The Independent Experts Advisory Group on the Data Revolution (IEAG) has acknowledged the crucial role of data for decision-making and monitoring.

• UNSTAT, the nodal agency for monitoring the SDGs, indicate key role of reliable data sets with adequate disaggregation and granularity in measuring progress around SDG targets.

• FAO’s VGGT (2012), ratified by more than 40 countries, outlines the importance of monitoring in achieving equity over natural resources
The Rationale: Open Data for Improved Land Governance in India

- India has considerably improved data production, accessibility and availability to ensure proper alignment of national level statistics and induce international comparison.

- Flagship program Digital India Land Record Modernization Program (DILRMP) made considerable investments and progress

- Land is a state subject in India; Karnataka’s ‘Bhoomi’ and Gujarat’s ‘e-Dhara’ considered to be very successful on records computerization, on grounds of accessibility, efficiency, transparency etc.

- Apart from DILRMP, other admin data sets are available for monitoring

- Monitoring of land rights indicators through use of reliable administrative and survey data can inform governments and non-state actors about the impacts of land legislations on societal progress and contribute towards better policy making.
II. The Scope & Objectives
The Scope & Objectives

- Secure and equitable rights over natural resources is globally seen as a precursor to the achievements of numerous global development priorities including poverty elimination, food security, rural development, gender equality and women empowerment etc.

- Secured land tenure is essential for effective land use, investment, job creation, agricultural productivity, inclusive urbanization, cultural identity, biodiversity conservation and climate resilience and disaster preparedness.

- In the context of national and global public policy and priorities, we attempted to track and report the following land indicators under Target 5a of SDGs related to women land rights using different open data sources:
  1(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and
  1(b) Share of women among owners or rights-bearers of agricultural land, type of tenure.
III. Methodology
Methodology

- Review of potential data sets
  - UNSTAT prescribes the data sources as LSMS-ISA and DHS surveys and National Household Income and Expenditure surveys. In India, LSMS executed once in 1997-98 and DHS done as NFHS
  - GRLD (FAO database), uses Agricultural Census information on land holdings
  - In Indian context, besides Agricultural Census, IHDS, NFHS, Population Census, SECC are potential open source datasets, for periodic and effective monitoring
- Comparative appreciation of the metadata and methodologies of potential data sets (viz. Agri Census, IHDS, NFHS, Census, Nationally/state representative HH Surveys)
- Analysed potential data sets to address WLR monitoring in India, individually or in combination.
- Calculation of the indicator according to the SDG requirements,
- Comparision of trend and inter & intra-state variations
- Analysis of factors influencing women land rights
Using Open Source Agri-Census Data
IV. Results & Discussion
## Comparative appreciation of Indian Open data sets vis-à-vis Global requirements

<table>
<thead>
<tr>
<th>Data sources</th>
<th>Global expectation</th>
<th>Open data sources</th>
<th>Key observations</th>
</tr>
</thead>
</table>
| Administrative records reported by national land institutions | Should be compared with household surveys (for informal documents)                  | DILRMP            | Pan India implementation lacking  
Gender parameters not introduced in most states; prospective implementation will not be useful                                            |
| Census and multi-topic household surveys conducted by National Statistical Agencies. | Should provide information as per SDG indicators                                     | Agricultural Census, IHDS & NFHS (Household Survey) | Agricultural census : only on agricultural lands and operational holdings, as per gender of head of household  
IHDS and NFHS report information on residential land. IHDS is carried out in rural areas.  
Variable meta data                                                                 |
<table>
<thead>
<tr>
<th>Datasets</th>
<th>Strength</th>
<th>Weakness</th>
<th>Opportunity</th>
<th>Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td>DILRMP</td>
<td>Legal land records, reports plot level information on ownership; most of the states have digitized land records;</td>
<td>Data not available for all states; difficult to extract and report; Gender not universally included. Records are not updated</td>
<td>GoI initiative to add ‘gender’ parameter; resurvey ongoing to update records; universalization expected soon under DILRMP aiming Titling;</td>
<td>Gender parameter requires to be added to millions of old records (viz. Odisha alone has about 14 million LR), which may take more time; LR updating will also be tedious</td>
</tr>
<tr>
<td>Agricultural Census</td>
<td>Legitimacy, multi-level, granularity (up to tehsil level), periodicity (5 years) and disaggregation across ethnic and land size; population coverage; verification of land records in 90% of states</td>
<td>Reports ‘Operational holding’; treat gender of head of HH; reports at household-aggregated level</td>
<td>WCA, 2020 proposed collection of sex-disaggregated land ownership data; Existing procedure collects ownership data and re-tabulates, therefore, can be made available</td>
<td>Potential Conflict with Land departments, in case reports paint a poor indicators; dwindling resource allocation</td>
</tr>
<tr>
<td>IHDS</td>
<td>Nationally representative statistically sound HH survey; reports plot ownership data (up to 3 owners per HH)</td>
<td>Data not available for 40% of districts; based on interviews;</td>
<td>Availability of inheritance and tenancy data can be used to link women land rights to other dimensions</td>
<td>Acceptance of State and district land administration, data being based on interviews only; continuation of survey</td>
</tr>
<tr>
<td>LSMS/ DHS (NFHS)</td>
<td>Identified by UNSTAT and FAO as source for SDG indicator</td>
<td>LSMS done once in India (1997-98) only for UP and Bihar India</td>
<td>State level household surveys can be organized in this line</td>
<td>Acceptance of State and district land administration</td>
</tr>
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</table>
## SWOT of Complementary Datasets

<table>
<thead>
<tr>
<th>Datasets</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Socio-economic Caste census</td>
<td>Full geographical coverage; Disaggregation across caste and education</td>
<td>Land ownership data is not disaggregated by sex</td>
<td>Gender disaggregated information on land ownership can be reported</td>
<td>Done once in India in 2011; data extraction is little cumbersome</td>
</tr>
<tr>
<td>Population Census</td>
<td>Full geographical and population coverage</td>
<td>Gives information on cultivator, hence not a complete measure of WLR</td>
<td>Questions based on gender disaggregated ownership rights can be incorporated</td>
<td>One of the oldest surveys, might take time to make any changes in the questionnaire</td>
</tr>
<tr>
<td>Micro-studies</td>
<td>Provide actual and specific information for a statistically representative small population</td>
<td>Coverage is sporadic geographically and uncertain temporally</td>
<td>Data useful to validate macro data viz. Agricultural Census</td>
<td>Availability and continuity uncertain</td>
</tr>
</tbody>
</table>
### Comparative appreciation of WLR indicator

<table>
<thead>
<tr>
<th>Data sets</th>
<th>Potential Women Land Rights Indicators</th>
</tr>
</thead>
</table>
| **Agricultural Census**     | Share of women operational holders among total operational holders of agricultural land  
|                             | * 100                                                                                                                                                                  |
| **IHDS & Population Census**| Share of adult women population owning agricultural land among total adult land owners of agricultural land  
|                             | * 100                                                                                                                                                                  |
| **Socio Economic Caste Census** | Share of women headed households engaged in cultivation among total households engaged in cultivation  
|                             | * 100                                                                                                                                                                  |
Status of WLR in India: Based on Agri-Census

- Women in India operate less no of land holdings, lesser area and smaller size of holdings
  - Operate 12.8% of operational holdings that constitutes 10.34% of the area of holdings.
  - Average size of women’s land holding is 0.93 ha, in comparison to 1.18 ha for male and 1.15 ha for all.

- Regional disparity is evident
  - States in the South show more no and area of land holdings

- In the last decade (2001-11), number (36.12 %) and area (23.45 %) of women’s holdings have increased, at a pace, higher than their population growth.
  - States like Sikkim, Rajasthan, Bihar, Madhya Pradesh and Daman & Diu have shown higher increased in women’s land holdings,
  - States/UTs like Chandigarh, Delhi, Jammu & Kashmir, Puducherry and Kerala report a negative trend in the percentage change of women’s land holdings.
Most of the districts have 5-15% of holdings in the name of women; Southern districts have a comparative better picture.
Southern states have better land rights of women

Tripura has highest no of holdings with 34.6%, while Punjab has only 0.9%
Comparative status of women land rights indicator in India

- Agriculture Census
- IHDS and Population Census
- SECC
Comparison of Agricultural Census findings with that of Micro studies

- Percentage of female operational holders to total census households
- Percentage of women owning land as per micro studies

<table>
<thead>
<tr>
<th>State</th>
<th>Female Operational Holders (%)</th>
<th>Women Owning Land (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Bihar</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Gujarat</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Karnataka</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Odisha</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Kerala</td>
<td>17</td>
<td>21</td>
</tr>
<tr>
<td>Tripura</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Average</td>
<td>9</td>
<td>10</td>
</tr>
</tbody>
</table>
Potential influencers of WLR

• **Historical land Revenue systems**
  States (southern states) governed under **Ryotwari system** have better land rights of women than that other two systems.

• **Land Policies/laws**
  States (southern states) that have **amended Hindu Succession Act 1956**, earlier to that by the Centre. In these states the **Muslim Personal Law (Shariat) Application Act, 1937** has been extended to agricultural lands.
  State tenure laws also influence women’s land rights to a great extent.

• **Land records management**
  States with a gender sensitive land records management system (**introduced 'gender' field in land records**), particularly Andhra Pradesh and Karnataka have better land rights of women.

• **Local customs**
  The prevalence of **gender discriminatory customs** like *karewa* (restricts widows’ rights to land resources) in Northern India often obstructs women’s legal rights to land where as tradition of **Marumakkattayam** (matrilineal inheritance) in southern states allows women to own land.
Contd.

• Land Grant Schemes
  Andhra Pradesh, Karnataka and Odisha have at different times, purchased homestead or agricultural land to allocate land to landless women. For example, Odisha allots at least 40 percent of government wasteland kept for agriculture and house site purposes, ceiling surplus land and Bhooand land to landless people, with high priority being given to landless widows and unmarried women up to 30 years of age.

• Incentives for women
  States that have reduced stamp duty (Himachal Pradesh, Punjab, Uttar Pradesh, Madhya Pradesh, Haryana and Delhi) for registration of property in the name of women show increasing trends.

• Presence of active Civil society organizations and women’s organizations
  States like Andhra Pradesh, Himachal Pradesh, Gujarat, Rajasthan, Odisha are showing encouraging trends
V. Conclusion
Conclusion

• The present analysis indicate the availability of potential open datasets to begin with
  • But, scope to improve clarity, comparability and coherence
  • Majority of the data sources lack desired disaggregation, multi-level, access
• Data sources like Agricultural census must consider reporting agricultural land ownership data
• Application of IT and multi-stakeholder-collaboration in data production and data-convergence (from different sources) will significantly help in improving data-quality, reliability and access and in meeting the global standards.
• Open-access availability of such data with scope of meta-data standardization to enhance scope for data integration
VI. Key Takeaways
Key Takeaways

• Creating an institutional platform connecting land data-agencies (viz. Division of Agricultural Census) with policy makers (viz. DoLR or Niti Aayog), may be a starting point towards institutionalization of proactive data sharing and integration into land-policy space.

• Government of India must consider inclusion of “Land” to the list of “High Value Datasets” of data.gov.in (Open Government data Platform in India).

• It also needs to develop standards for the land domain under the e-Governance Standards (http://egovstandards.gov.in/) to ensure sharing of land information and seamless interoperability of data on global and local platforms, enhancing e-governance applications and for monitoring national and global targets including SDGs.
Thanks!
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