

Impact of the Non-Personal Data Governance Framework on the Indian Agricultural Sector

Summary

Sharing data for the purposes of social and economic development and innovation has gained importance in India in the recent past. This has been reflected as the core objective of policies such as the report by the Committee of Experts on Non-Personal Data Governance Framework (NPDR).

The report, a revised version of which was released in January 2021, focuses on establishing standards for the collection and sharing of non-personal data (NPD) in India. The recent report by the Joint Parliamentary Committee (JPC) recommends including non-personal data in the Data Protection Bill 2021 leaving open an option for a subsequent regulation on NPD. The recommendation heightens the urgency for policy-makers to adopt an evidence-based approach to regulating India's data economy. If finalized, India will be one of the first countries to have a "single national level regulation" that explicitly regulates the use and sharing of non-personal data horizontally across sectors. The NPDR takes a structured approach to sharing of NPD based on the purpose of sharing. The NPDR notes that NPD sharing for business purposes already exists, and therefore makes no recommendations regarding the same, instead focusing on sharing of NPD for sovereign and public good purposes. The NPDR envisages the creation of High Value Datasets (HVD) to facilitate NPD sharing for public good purposes. HVDs can be created for several domains that can benefit the society at large, including agriculture.

In this context, this research report examined the possible impact of the NPDR on the agricultural sector with the aim to ground recommendations made by the Expert Committee into sectoral reality, and understand the impact that the NPDR is likely to have

on the agriculture sector. The research included an examination of current Indian Government policies to regulate data sharing, with a focus on the agricultural sector, a review of current data sharing practices in the Indian agricultural system through a case study of two community level organisations and expert interviews, and international best practices from jurisdictions such as Australia, the European Union (EU), New Zealand (NZ) and the United States (US), whose agricultural sectors have adopted a bottom-up, voluntary framework for the data sharing process.

The NPDR defines a number of concepts which are broad and lacking in clarity. Such ambiguity (may) cause confusion for both farmer communities as well as agri businesses. For instance, the lack of clarity in the definition and functioning of data trustees within the NPDR is only adding more confusion at a grass roots level on how farmer communities will be able to protect their NPD. For small and medium businesses, there is confusion on whether their industry will meet the threshold of 'data drivenness', as they will be required to share data without any incentive to do the same, while also having to grapple with increased compliance costs. The lack of clarity also extends to other aspects including the guardrails that will be put in place to enable secure sharing of data, and the technical standards for interoperability and privacy protections. Finally, farmers' data is being collected without their meaningful consent, and data processing

and sharing is being advocated in a legal ecosystem bereft of a data protection legislation; however, this is expected to be remedied soon with the introduction of a data protection Bill in Parliament.

Government policies on data sharing in the agriculture sector, a significantly complicated subject, possibly ignore wide and effective consultation with farmer groups and follow a top-down approach. Most policy documents are available only online and only in English – adding to mistrust and institutional issues being overlooked. The policies also may not address the low levels of digital literacy / access amongst farmers, meaning that farmers will not ultimately benefit from sharing their data given that they are unable to use digital devices required to access the benefits. The issue with the credibility and quality of agricultural datasets in India is well known, also need to be addressed and, the policies may not be accounting for this, thereby leading to unreliable datasets being shared for analysis. Unintended harms and exclusion of farmers from services arising from such analysis are not adequately addressed by the policies.

These issues remain largely unaddressed in new drafts of the data protection and sharing frameworks in India, including the NPDR. While the focus of policies has shifted to the interoperability of data in the agricultural sector, they are pivoted on the objective of economic development. As a consequence of this, farmers' interests remain de-prioritised. If left unaddressed, these institutional issues could stifle innovation in the economy and disincentivise stakeholders from participation.

The experience of international best practices shows that agricultural sectors in major economies have chosen to go with an ecosystem-enabled voluntary framework. Such a framework aims to promote altruistic sharing and innovation through the establishment of a trusted ecosystem, while reducing regulatory and capacity burdens across stakeholders. The working of the Ag Data Transparent[4] [5] in the USA (which inspired the codes in Australia and New Zealand), and the EU Code of Conduct on agricultural data sharing show that investing in infrastructure, legal and technical building blocks that foster a trusted network for voluntary sharing while incentivizing stakeholders to participate in such a framework helps build policy that is reflective of varied needs and concerns across the board.

To this end, we make the following recommendations:

Recommendation 1

An inclusive consultative method must be used while developing data sharing policies



Government policies in general, and the data sharing policy of the NPDR in particular, have been drafted without adequate consultation with the primary stakeholders. In this case, it includes farmer communities, small agricultural businesses and start-ups. Representation has instead been made through non-governmental organizations that try to reflect the voices of stakeholders but submissions are not public, and there is no way to ascertain if farmer interests have been represented at all. Just like in the BT-Brinjal consultation in 2010, Governments must send representatives on the ground to explain the policy and get the feedback of these stakeholders.

Recommendation 2

Incentives must be included in the policy to encourage stakeholders to participate



Data sharing frameworks are a relatively new and evolving concept in India. More particularly, mandatory data sharing leaves stakeholders with little choice but to participate in the system. There may be disincentives to participate in mandatory regimes which may result in non-compliance, retreat from the market, hampering innovation, and mistrust of the Government. It is, thus, important that incentives such as reciprocity, collaboration, compensation for collecting and sharing data, investments by the Government in the agricultural sector, improved technology for interoperability and assured standards for data protection be included as a prerequisite to any data sharing recommendation, especially if the government chooses to go down mandatory pathways.

Recommendation 3

Adopt an evidence-based approach to examine data sharing frameworks



A common thread that was found between global jurisdictions that identified data sharing frameworks was that they tried different means of policies, consultative research and testing. In a similar manner, instead of deciding on a mandatory data sharing framework, which has no evidence from the ground, the Government must take time to allow stakeholders to experience different data sharing mechanisms and consider the feedback through pilots and sandboxes, prior to implementation. This provision of choices and tests gives flexibility to stakeholders and builds buy-in to participate in a data sharing ecosystem that engenders trust.

Recommendation 4

A sector-specific policy might be more effective than a generalised data sharing policy



The benefit of a sector-specific policy is that it can be tailored to the specific needs of the various stakeholders in the sector; examining the impact of the NPDR on agriculture has made this abundantly clear. Take for instance the National Health Data Management (NDHM) policy which focuses only on the needs of the health sector and the data sharing instances that take place there. A general framework like the NPDR might not be able to cover these nuances, which will lead to the missing out of important factors such as different incentives needed for stakeholders to be encouraged to participate.

Recommendation 5

Establish trust-based mechanisms for data stewards to enhance community-level trust in data sharing



To enhance trust within communities, and incentivize stakeholders to participate in voluntary data sharing, data stewardship models need to be encouraged. The NPDR already mentions data trustees, but their role is unclear, and are likely to see capture from other interested parties. There are other examples like consent managers which can be enhanced to become stewards, that work to safeguard the interests of communities and ensure they are able to minimise harms and draw value from their data. Community data stewards can enable communities to draw the greatest value from their data. Incentive measures could include translating policies to regional / local languages as well as creating digital learning opportunities for farmers.

Recommendation 6

Adopt an ecosystem data sharing approach



We suggest that the Committee of Experts on NPD rethinks its recommendation on mandatory sharing to a more ecosystem-led voluntary approach that brings together different stakeholders and is structured around incentives instead of mandates. An ecosystem approach involves investments, both by the government and the private sector, in the physical, technological and human infrastructure required for sharing, and to co-create solutions for public interest questions. This approach ensures greater compliance and ownership from the private sector, and also makes the government an active player in data sharing. It further enhances the role of communities and community based organisations that have the opportunity to carve out their roles in the ecosystem.

Conclusion

The NPDR (and the parallel report of the JPC) is an ambitious effort at creating a framework for the governance of data sharing of NPD in India. However, the top-down approach adopted in its preparation has led to the exclusion of key stakeholder inputs, and results in a framework that does not adequately address the existing issues in the data sharing ecosystem. Conversations with farmer communities, agri businesses and sectoral experts undertaken as part of the research indicate a sense of distrust among key stakeholders towards the data sharing ecosystem proposed by the NPDR.

A review of data sharing systems implemented in agriculture sectors across various jurisdictions highlights that an ecosystem-enabled voluntary approach to data sharing is most effective. However, in order to implement such a system there are open questions that require further research and study. These include how the gap in digital literacy is to be addressed, which is linked to the question of how best to ensure that benefits of data sharing reach farmers, and identifying suitable standards and taxonomy for interoperability specific to the Indian agriculture sector.