Designing for Uncertainty and Change

Community Led (Co)Design for Cooperative Governance

Designing for "Beyond Platformisation"

- The phenomenon of **Digitization ⇔ Digitalization ⇔ Datafication**

- Digitalization in agriculture and food systems - tight control of agricultural value chains by Big Agri-Tech, always at the detriment of workers' rights - political, social and **economic**.

- Where does big data gain from sectoral datafication? Data as an economic resource that can be enclosed, deriving its value from aggregation and pooling.

- The logics of mainstream platform design, hence, is to aid this enclosure, through "informed" consent, or through design that **inevitably demands data sharing**.

Do existing co-design practices replicate models of platformisation?

Designing for "Beyond Platformisation"

Oftentimes, data cooperatives emphasize "open data" or "data for public good".

Ontologies and epistemologies of the Global North - access to digital is often not a challenge.

What is an uncritical "open data" paradigm?

Maximize centralization and monetization of data, while replicating architecture, governance and social relations of datafied systems.

Converging Community-led (co-) design with theory-led research: SEWA's Data Cooperative

- The caveats of technology-first design - the decentering of research participants to research subjects.

- Top-down technology research (a) does not allow for participants to design for themselves and (b) does not capture the truth of the field.

- Working within the frameworks of Participatory Action Research

- The "uncertainty" of India's agri-context: designing for change
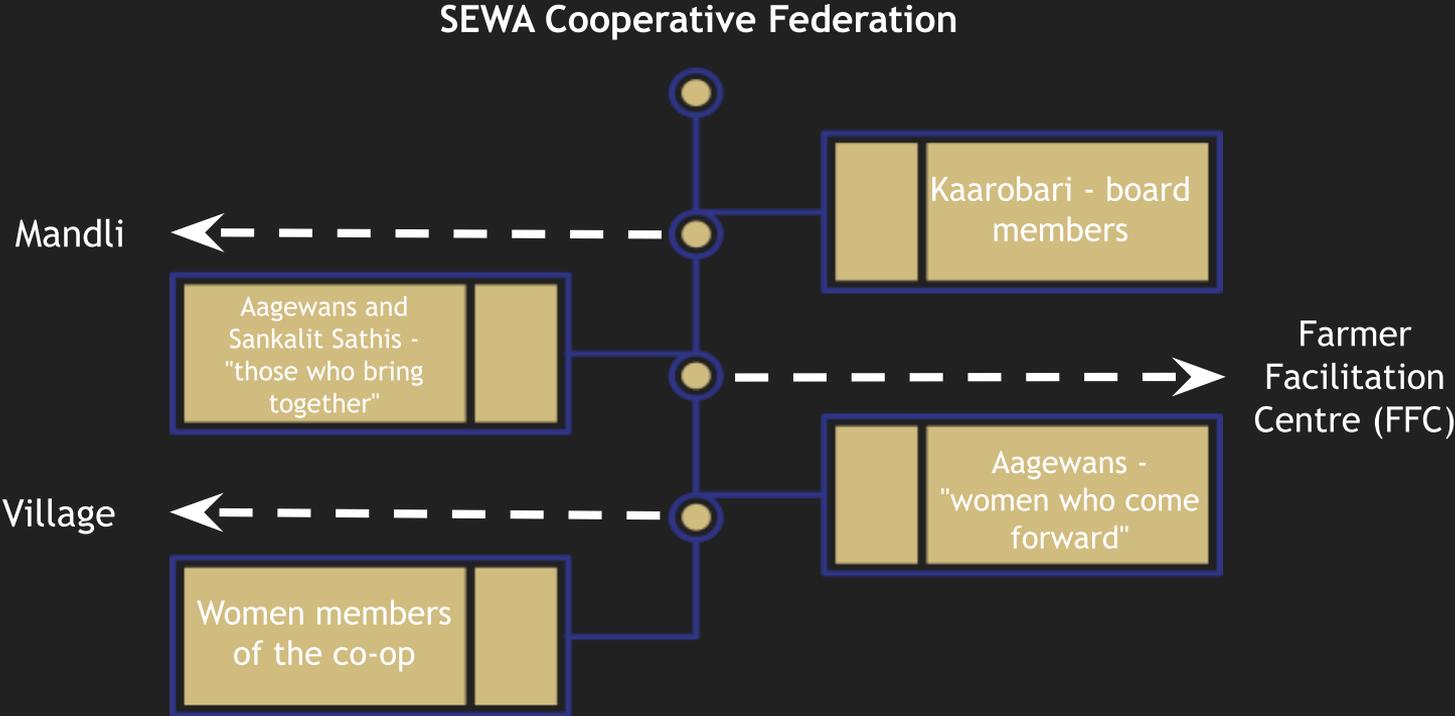

Poster on youth and agriculture at Kheda, Gujarat.

Converging Community-led (co-) design with theory-led research: SEWA's Data Cooperative

- What kind of alternative data systems can be created by adopting a base-up mapping of women's data needs?

- How can a process of trust-based co-design enable the creation of a data cooperative that circumvents the extractive paradigms of data capitalism?
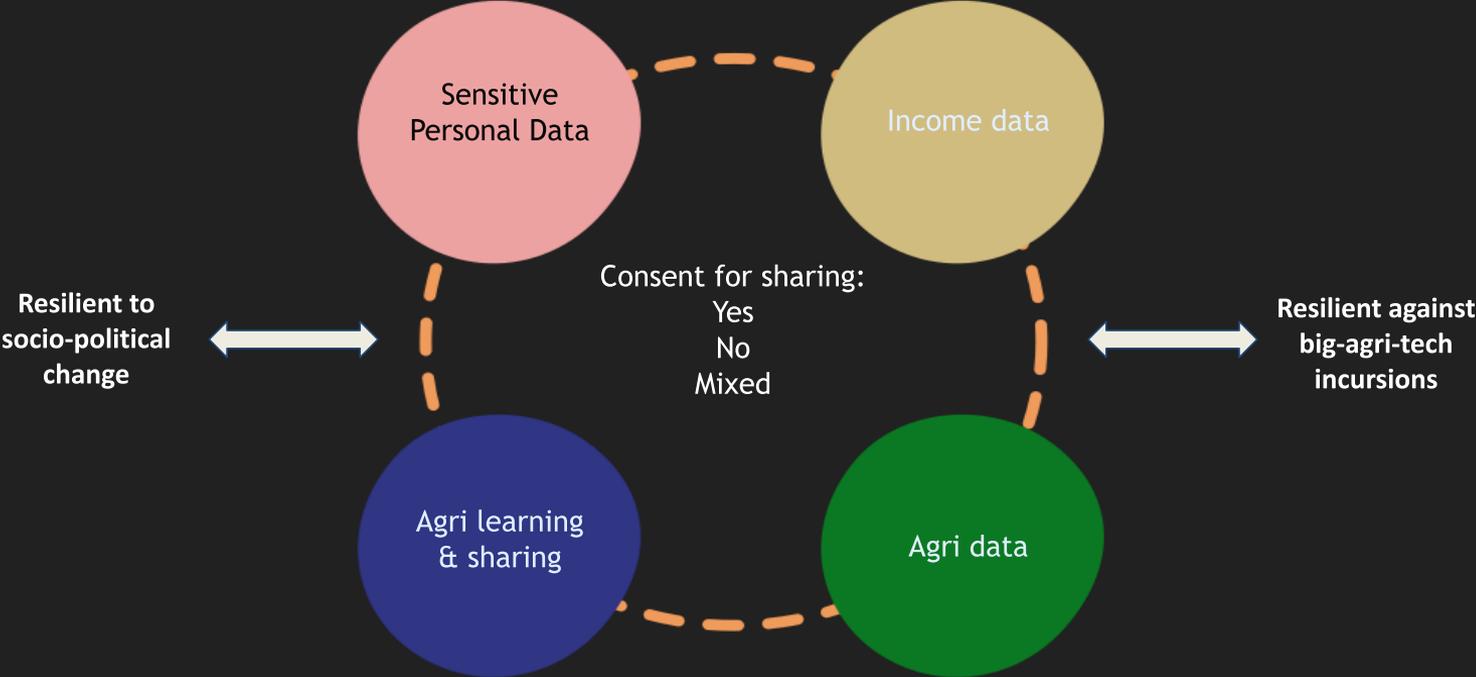
How do we use iterative, ground-up Participatory Action Research techniques to enable community-led design?

Location: Megha Mandli in Tapi and Kheda - Gujarat, India

Mapping SEWA's Hyperlocal, Federated Structure

SEWA Cooperative Federation

Mandli

Aagewans and Sankalit Sathis - "those who bring together"

Village

Women members of the co-op

Kaarobari - board members

Farmer Facilitation Centre (FFC)

Aagewans - "women who come forward"

From embedding participatory co-design to community design

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| Data Classification	Data Type	Consent to Share with Cooperative	Purpose of Use for Cooperative - Use Case
Agricultural Data	Input Cost	Yes	For providing targeted services to each farmer; for internal census and measuring targeting interventions; collected to offer aggregated data points in order to improve farm productivity.
	Input Materials Used		
	Input Time		
	Farming Techniques		
	Farming Troubleshooting Methods		
	Soil Condition		
	Income from Output	Mixed	
	Profit from Agriculture		
	Daily Wage Information		
	Daily Market Rates	Yes	Aid in creating real-time aggregated market information.

Designing for change: a principles-based techno-institutional model


The community centre at Kheda, Gujarat.

- Recognizing a "vertical-horizontal federation"

- Designing functional alternatives to the "single source of truth" databases – beyond reducing uncertainty?

- Fairness, Accountability and Transparency in Data Science: FAT by Design approach (Stoyanovich et al., 2017)

- Maintaining data provenance, the process of "tracing and recording the origins of data and its movement between databases"

What can we learn from the hard-won battles of trade unions, gig workers and informal workers? How do we prevent the transfer of data value to market-driven data intelligence?
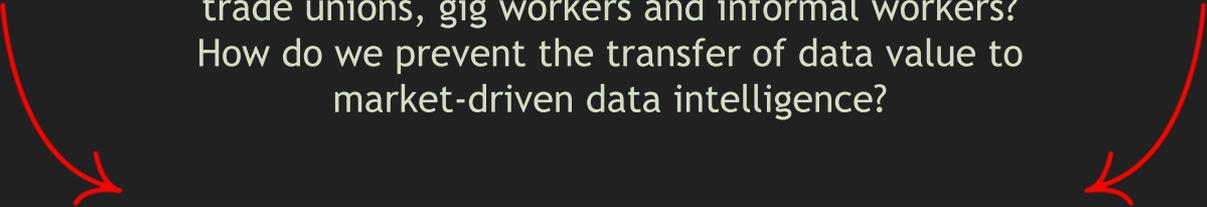
A data-rights approach to data governance

How do we want our data to be stored, processed, monetized and protected?

Data Minimization to Data Collectivism
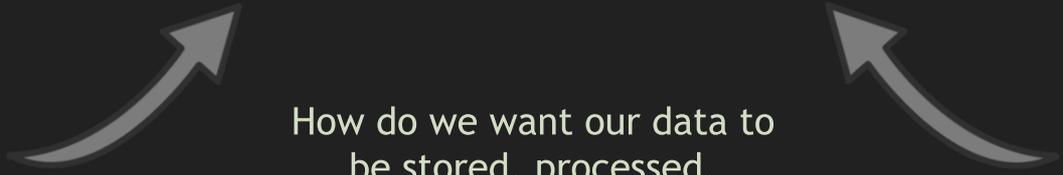
Not only should data be localised to the Mandli/land, but only agricultural data that can be of use to us ultimately must be collected.

Informed Consent and Optional Data Sharing

We generally are very wary of sharing data except if the Mandli asks us... the government collects so much data from us.

Anonymisation and Pseudonymisation

We would share information on what type of crops, cost of crops as long as it's not connected to our identity.

Transparency and Accountability

We would like to be told what this research is for... and we request you to share any data you've collected.

Restrictions on Data Offboarding, Sale and Re-use of Data

SEWA does not have any plans to sell or monetise data collected through the data cooperative... we are not even sure of whether data will get aggregated across Mandlis- the goal has always been to remain hyperlocal.

Collective Worker Rights to Aggregated Data

Everything we collect through this cooperative should be for the protection of all farmers.
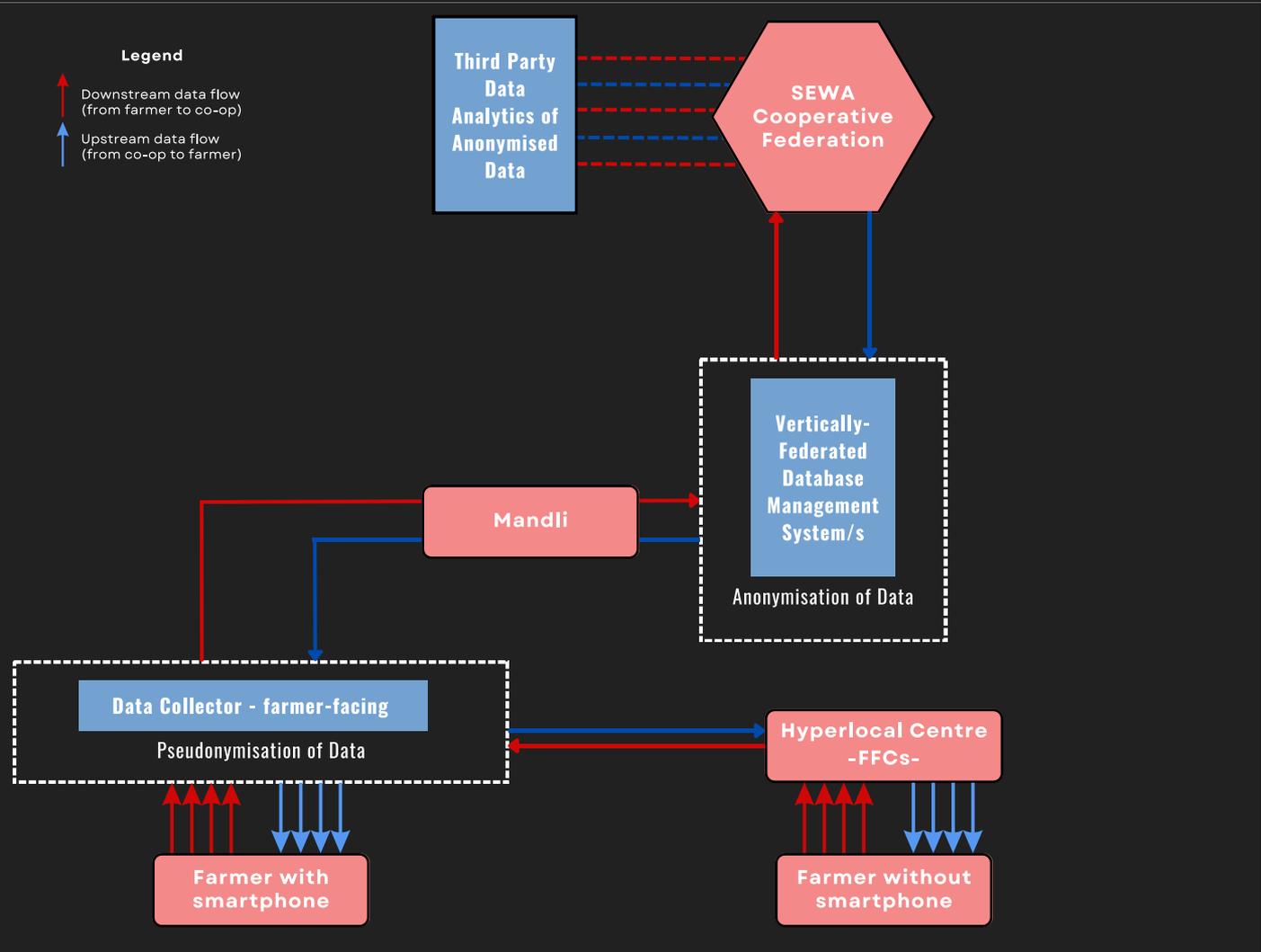
Techno-design for the Global South: Designing for Agility

Farmer Facilitation Centre, Kheda.

- Embedding uncertainties into techno-institutional design

- Modelling to establish predictability ⇒ Modelling for agility

- Techno-design ⇒ techno-institutional design

- Contextualize the transitionary political economy of agrarian India