

Akshvi: Digital Wallets for Climate Loss & Damage

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Why do we need a digital platform to capture losses

Affected communities



Lack of community driven data reporting



Lack of a public registry easily available for affected persons



Limited loss data to bridge economic loss gaps

Governments and donors



Delayed and time consuming assessments



Insufficient insights on cumulative losses to identify areas of support for resilience



Lack of a real-time ecosystem platform to interact, collaborate and register

Losses experienced by communities is almost ~2.5 times higher than the prescribed compensation rates making recovery from climate change induced disasters challenging

For instance, in case of livestock loss:

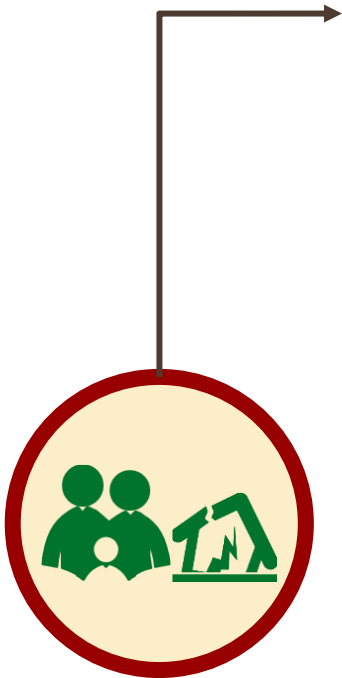


- Average re-purchasing cost of milch animals = ₹ 88,125
- Compensation received for loss of milch animals = ₹ 30,000
- Gap that a livestock rearer has to fulfill to re-settle into the livelihood = ₹ 58,125

Compensations today do not account for various other factors:

- Opportunity cost of income (Income loss during the period of destruction and re-building) Transportation or logistical costs
- White goods costs
- Re-purchase of capital and floating assets at market or circle rate
- Labour costs

Climatic events lead to ripple effects across lives and livelihoods and need an ecosystem level solution that helps address other indirect impacts



Disaster Strikes

Direct impact on lives, housing and livelihoods



Land and crop damage, loss of income, bad crop productivity, loss and damage of machinery, pumpsets



Loss of livestock and damage to livestock sheds, loss of income



Damage to walls, roofs, flooring and loss of white goods and assets



Loss of business assets, inventory, loss of income and clientele

Indirect socio-economic impact



Loss of school fee, stationary, material and increased absenteeism



Lack of access to primary healthcare services, development of communicable (such as water-borne diseases) diseases



Increased food insecurity due to loss of self-consumption crop reserves and produce, logistical challenges to access markets



Loss of documentation in the disaster leading to lack of access to government compensation and services

Invisible socio-emotional impact



Lack of access to clean drinking water and poor sewage conditions due to flooding



Lack of accessible services for persons with disability, elderly and toddlers



Lack of community spaces and increased cost and emotional burden on migration



Continuing mental health challenges due to accessibility of mental health services to address trauma and grief

The pilot revealed qualitative insights into other aspects of lives and livelihoods that were affected by floods in all the 6 districts.

My land, My loss



Platform Aakshvi enables tech driven solutions to estimate damage and losses, and orchestrate collective action towards climate resilience financing

Affected communities



Self-Reporting of loss

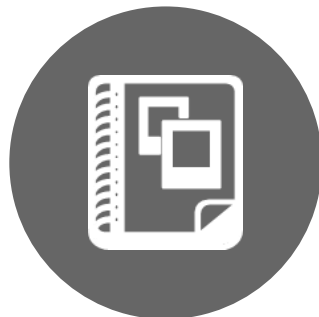


An **e-wallet/profile** of households



Comprehensive **integrated economic loss information** across domains

Governments and donors



Real-time and digitised data collection and assessment



Actionable insights for post-disaster response planning, risk reduction and disaster preparedness



Value added services and collaboration by both **public and private sectors**

Creating a Digital Wallet

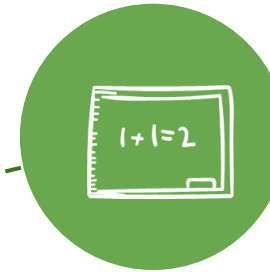
Each household's e-Wallet (or profile) was updated with data on loss, creating a loss registry

Use of AI to analyse unstructured data

Communities reported loss across Shelter, Livestock, Agriculture, Business

Text, Audio, Video based inputs

Volunteers or Community members accessed relevant forms



Respondents fed in demographic information such as their name, village name, age, income levels and documentation proof

At the back end, analysis was conducted using set formulae for each domain of loss and also cumulative household loss

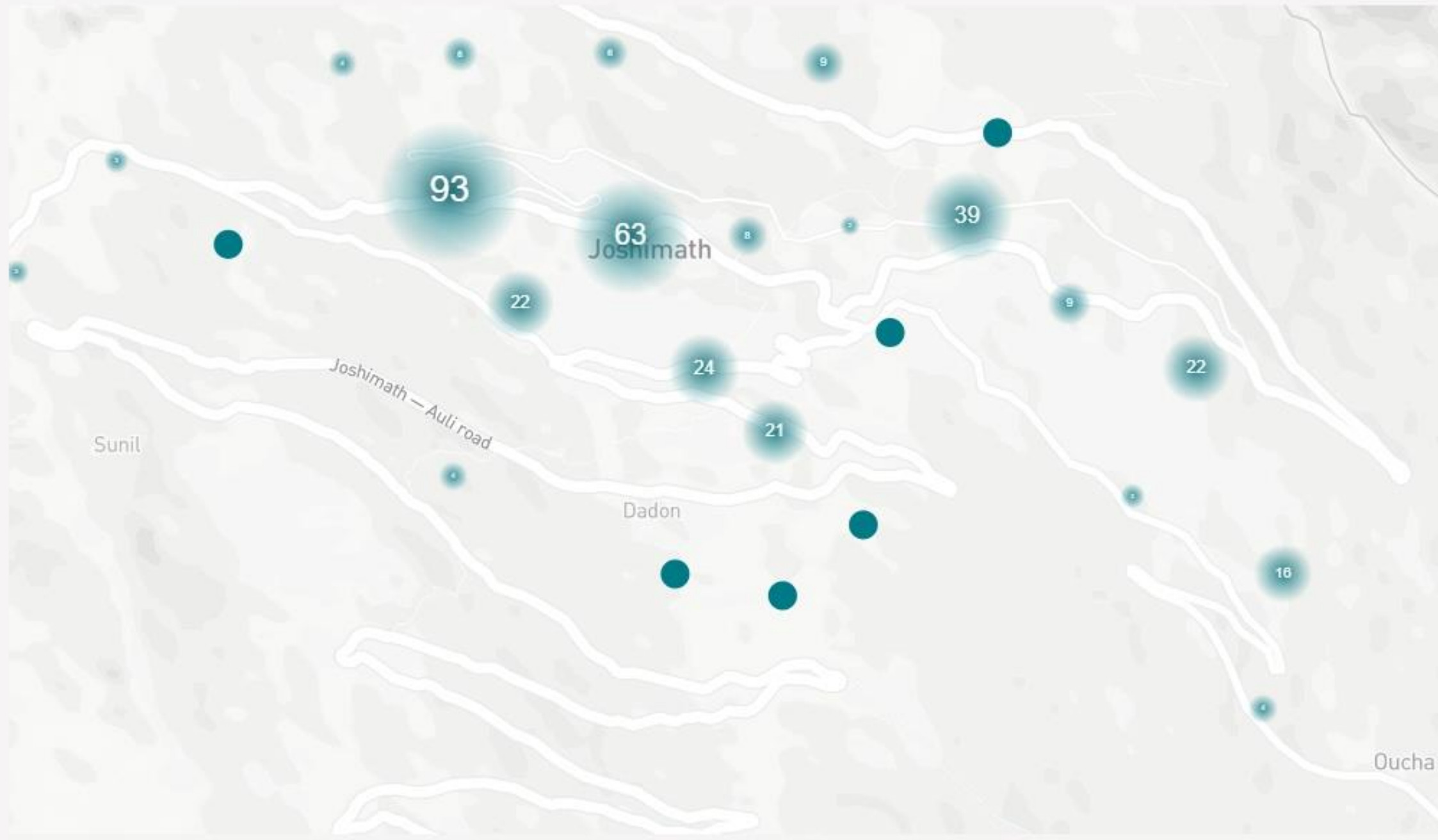
Aakshvi calculates the cumulative HH level loss, overall state level loss and loss at national level using set formulas

Digital Wallet

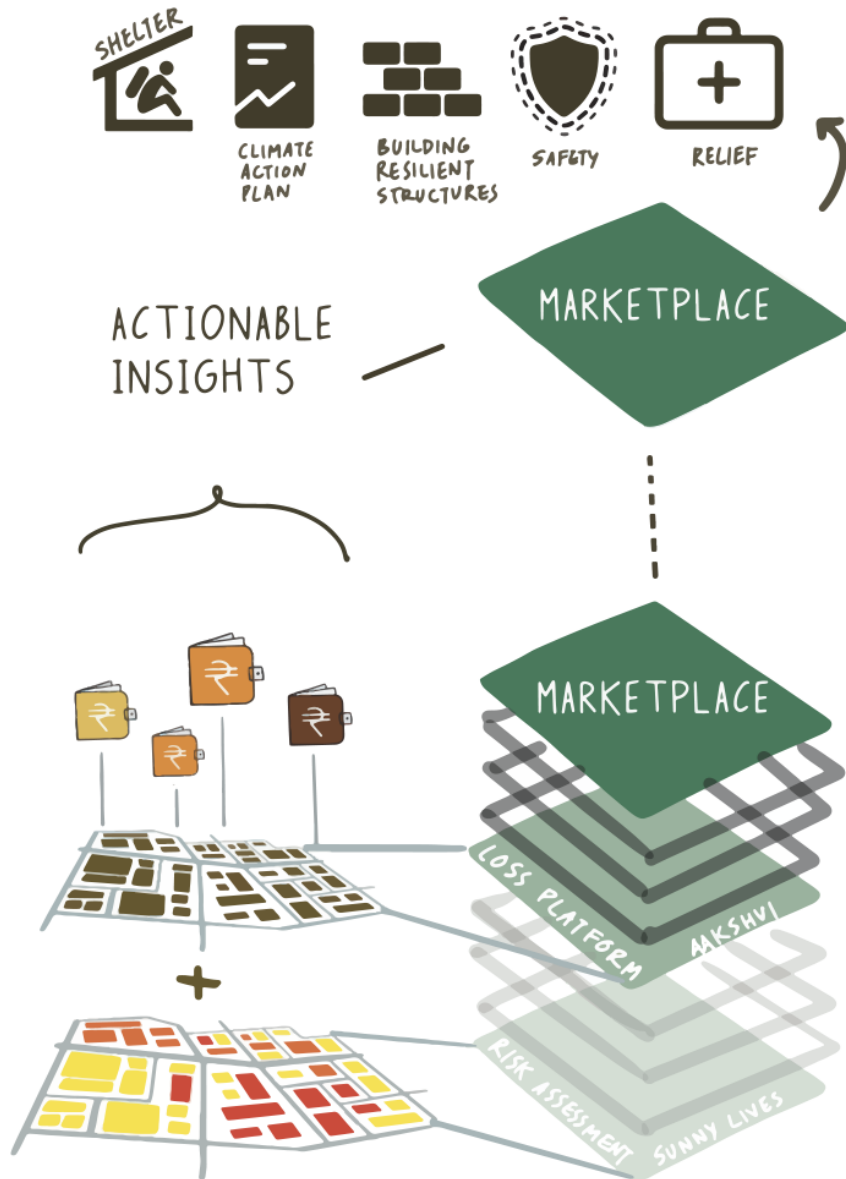


1. Economic Value of losses for household
2. Non-economic Data, Sentiments at household level
3. Profile of household, including geographic location
4. Verification status of data
5. Assistance received from external agencies.
6. Channel for communications. Eg. Early warnings, Government schemes

Map - Loss location

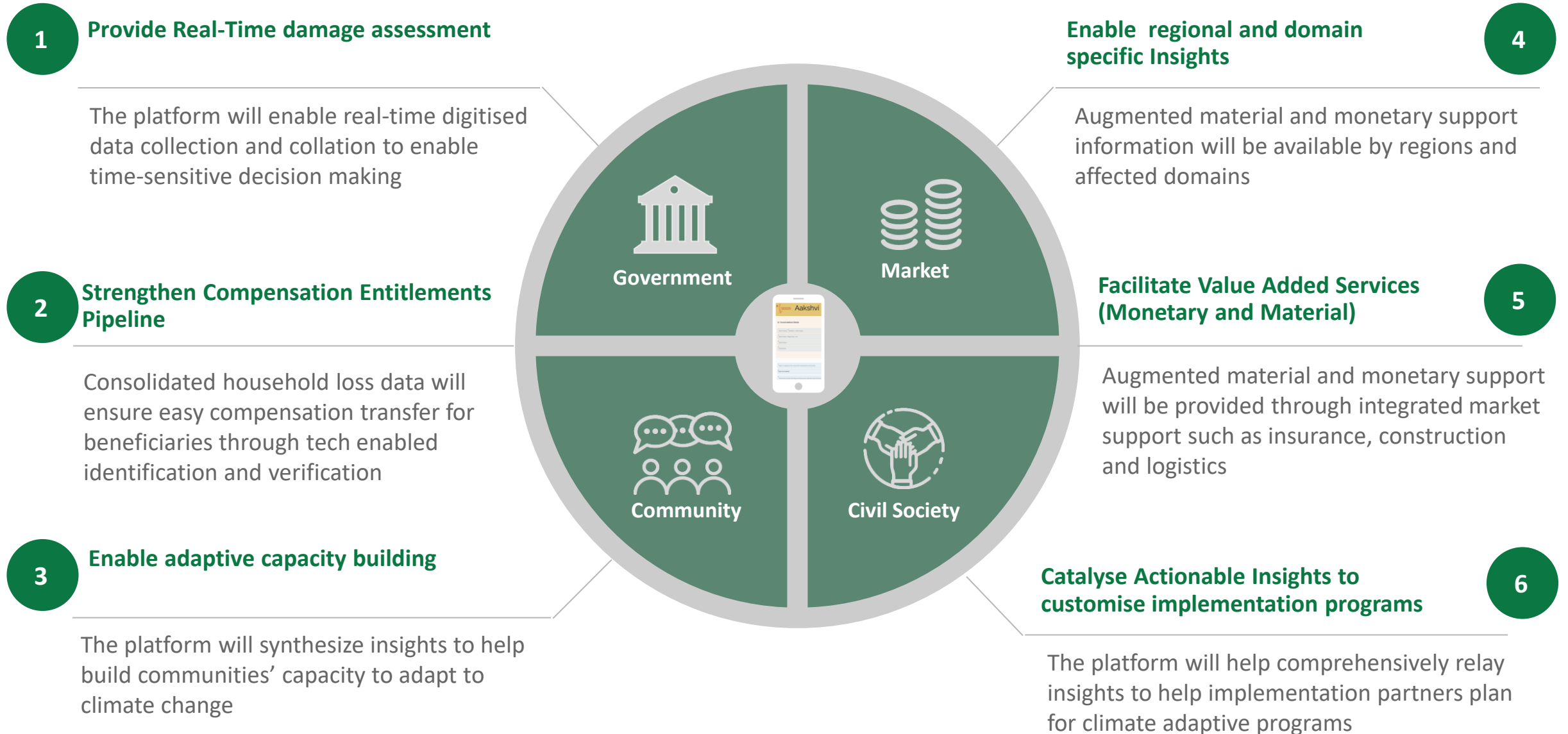


THE RISK & LOSS DATA GETS COLLECTED AND STORED TO PROVIDE ACTIONABLE INSIGHTS...



The loss wallet will enable direct financial support to affected communities

Dynamic Loss Platform – Enabling innovations at systems level



Next Steps:



1. Being developed to host data for 300million households in India
2. Developed as a Digital Public Good using open-source software
3. Pilot in 25,000 households in 2023
4. Building partnerships

Happy to discuss further collaboration : manu@seedsindia.org