Progressive Web App for

Information delivering of agriculture schemes for farmers

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Progressive Web App for

Information delivering of agriculture schemes for farmers

Motivation Interest in the agriculture domain Project 2 Design Research Seminar



OBJECTIVES



Creating a platform for farmers to access scheme related credible information without haassle



Keeping farmers updated with the available schemes for them



Helping farmers to understand the complex scheme related information



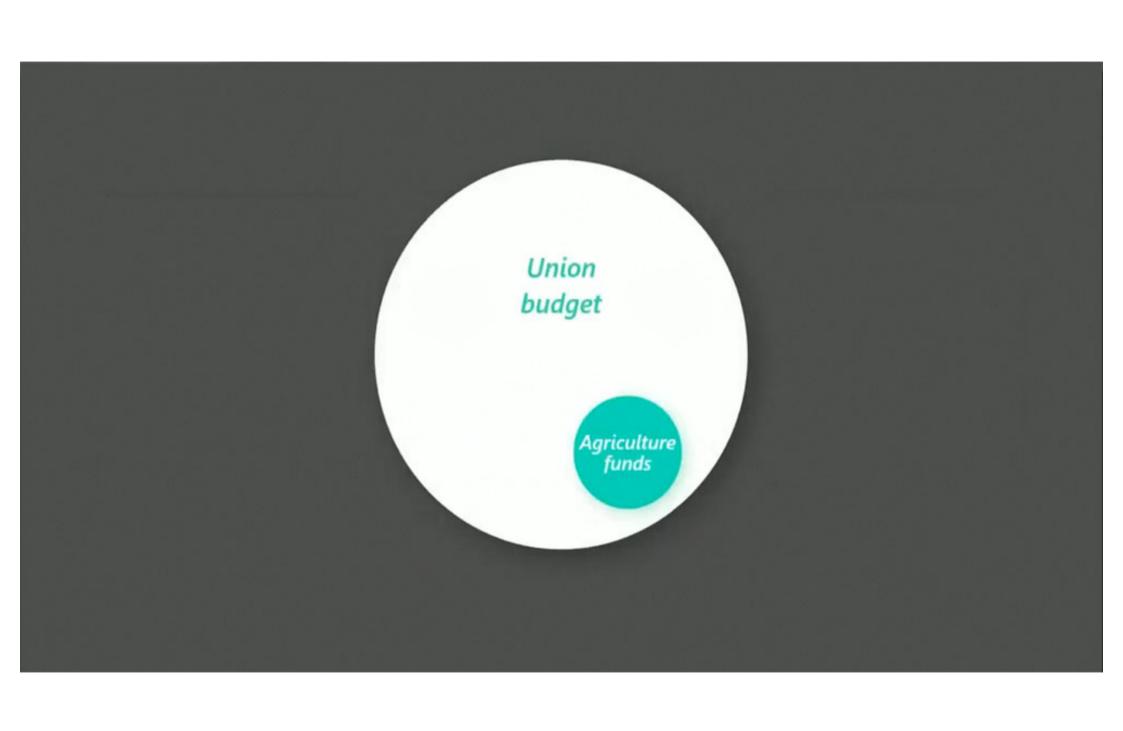
Designing a mobile app



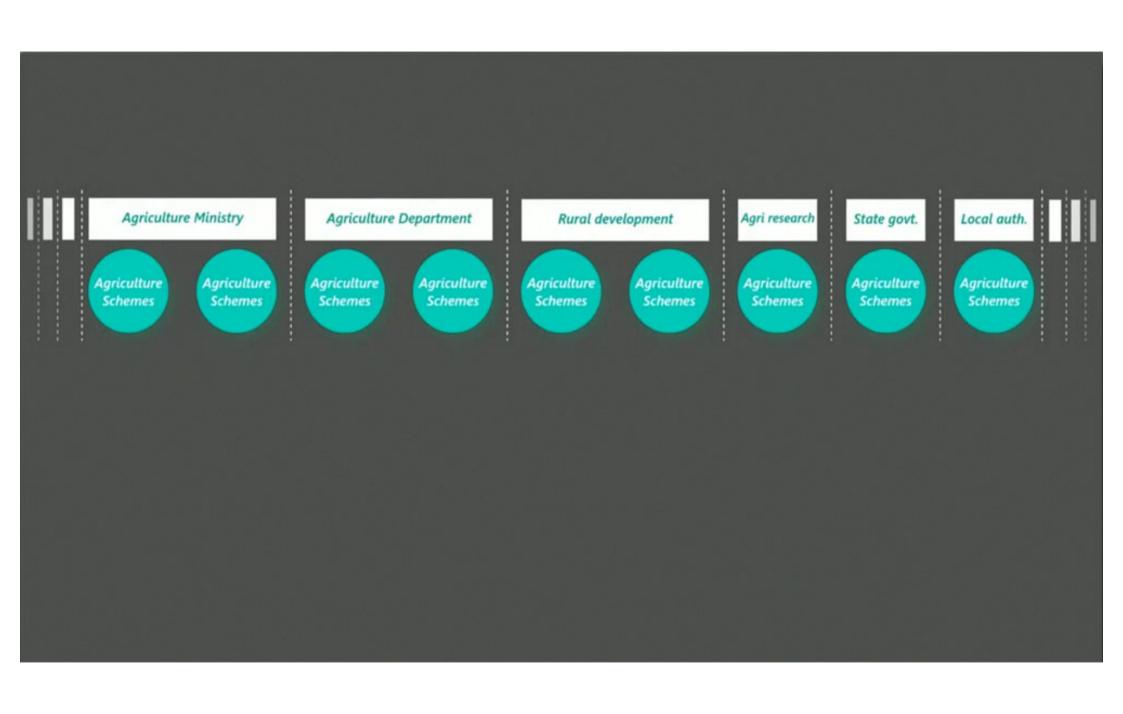
Farmers in Vidarbha Who use smartphones and understand Marathi



Stakeholders Agriculture Department, Chandrapur

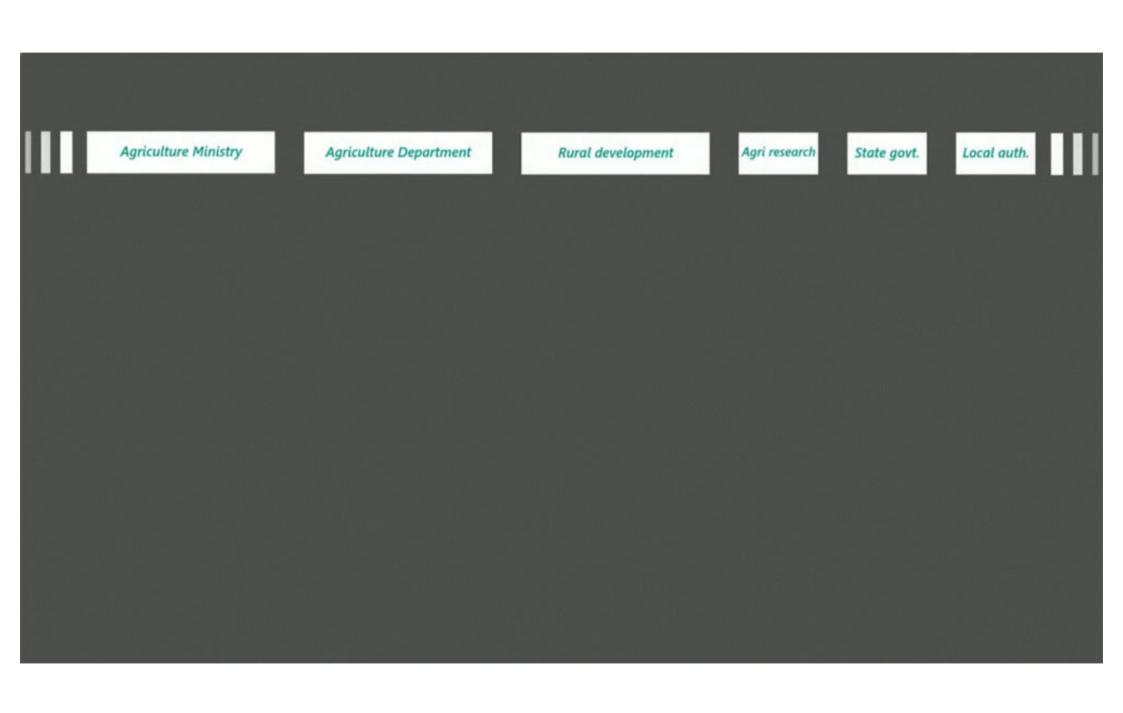


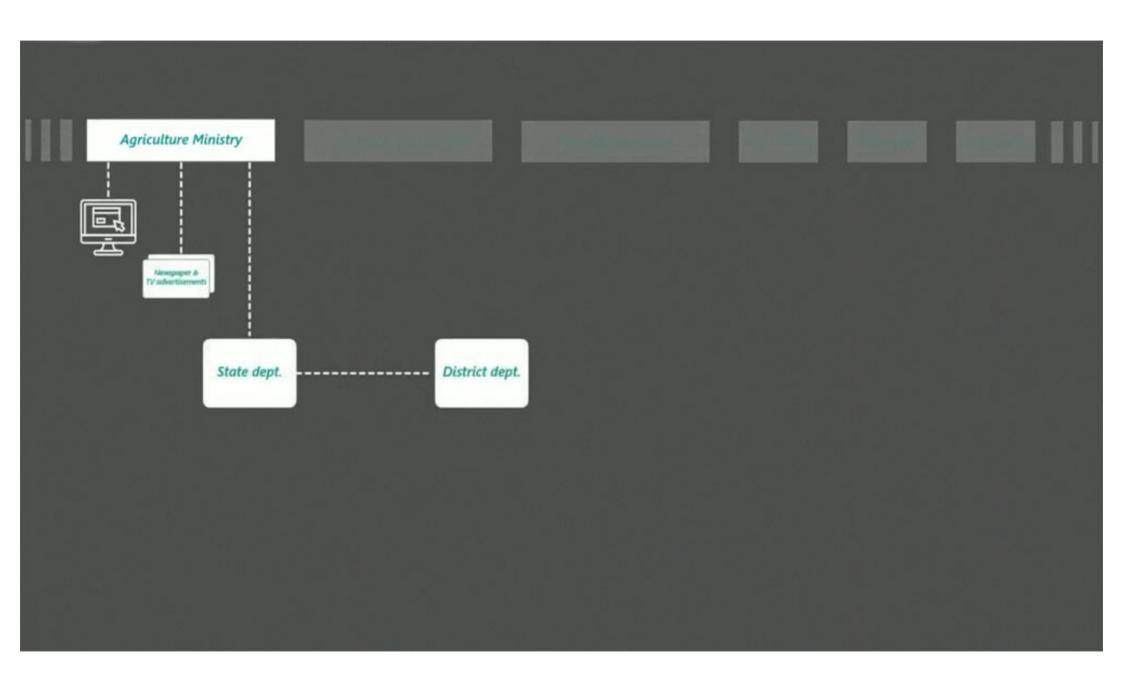
Agriculture funds Agriculture Schemes Agriculture Schemes Agriculture Agriculture Agriculture Agriculture Agriculture Schemes Schemes Schemes Schemes Schemes

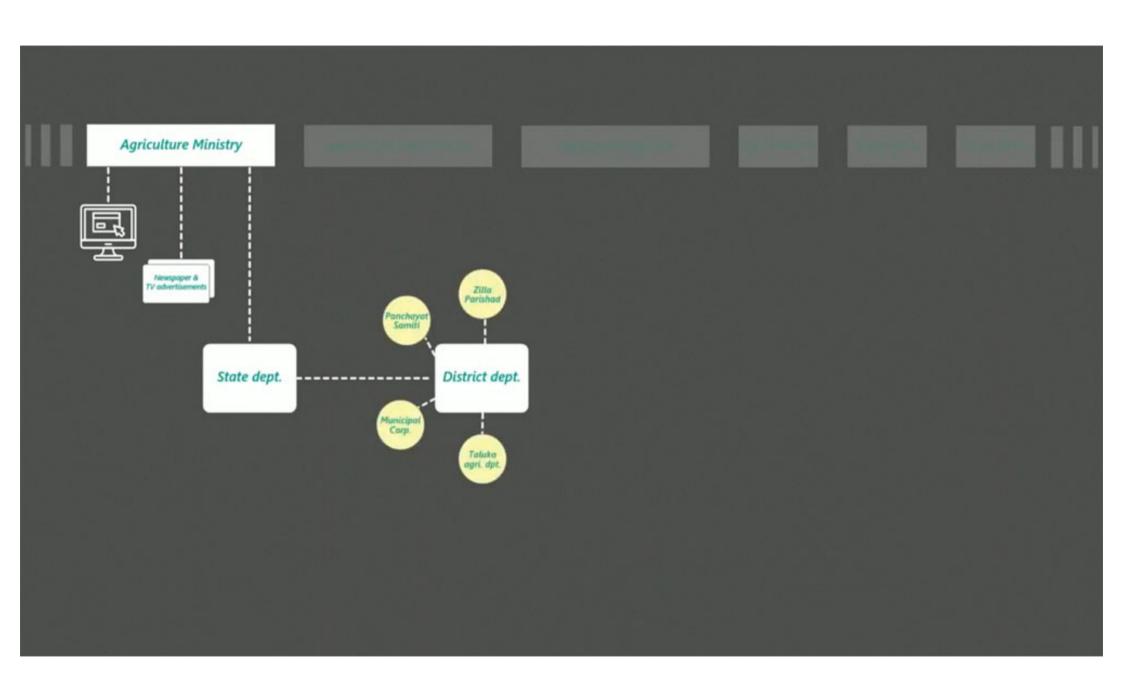


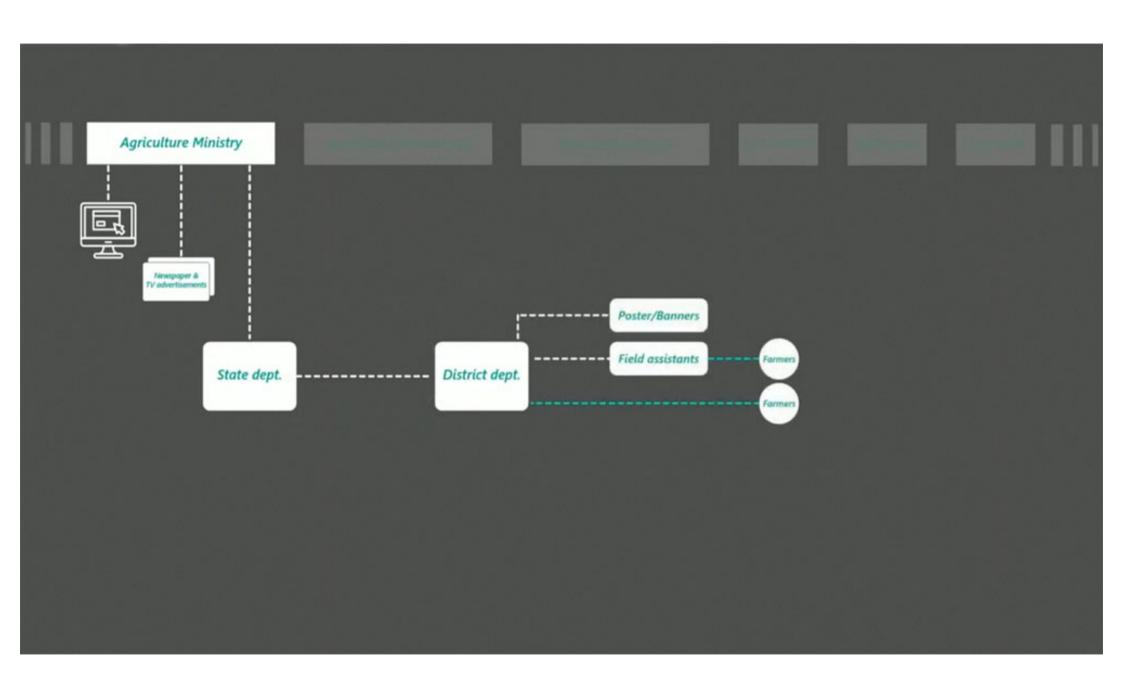
Awareness about agriculture schemes among farmers is poor because of lack of proper information communication channels

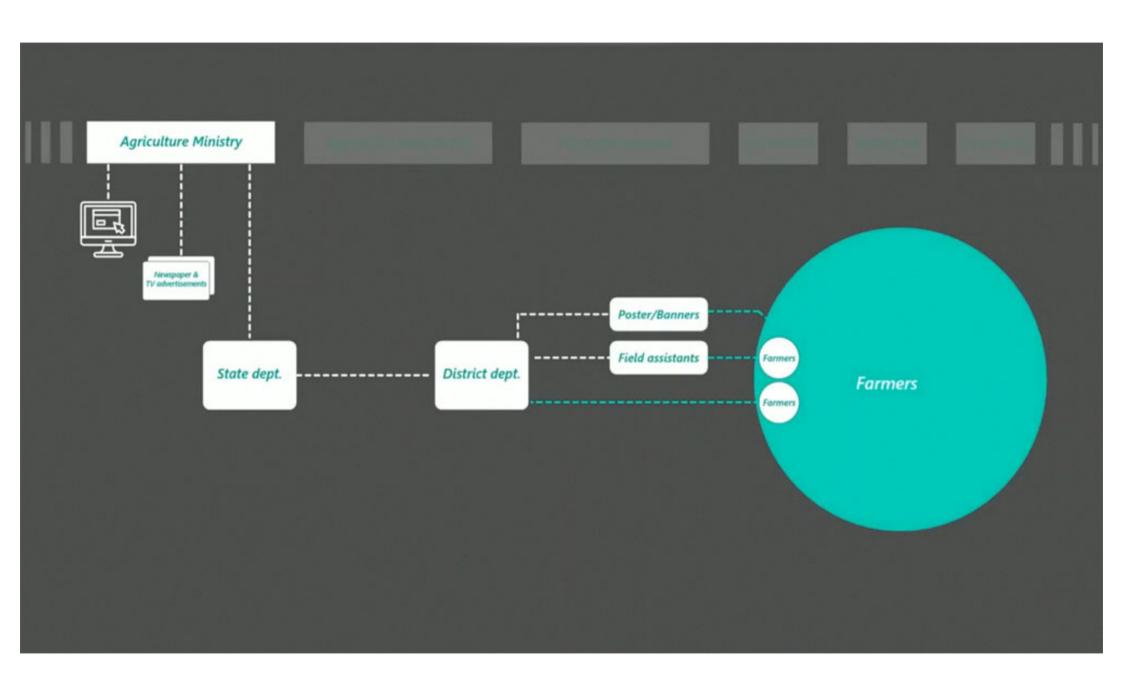
Bobade, M. A. H., & Mahajan, S. S. (2012), Karthik, T. T., & Ramalingam, L. P. (2013), and others

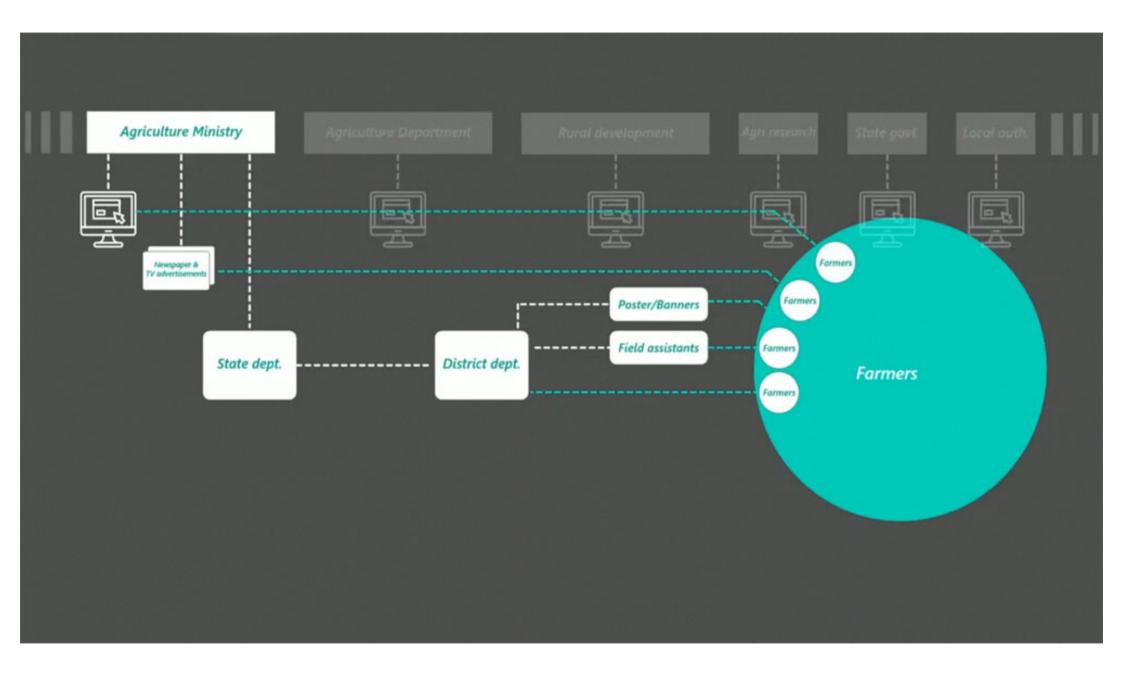


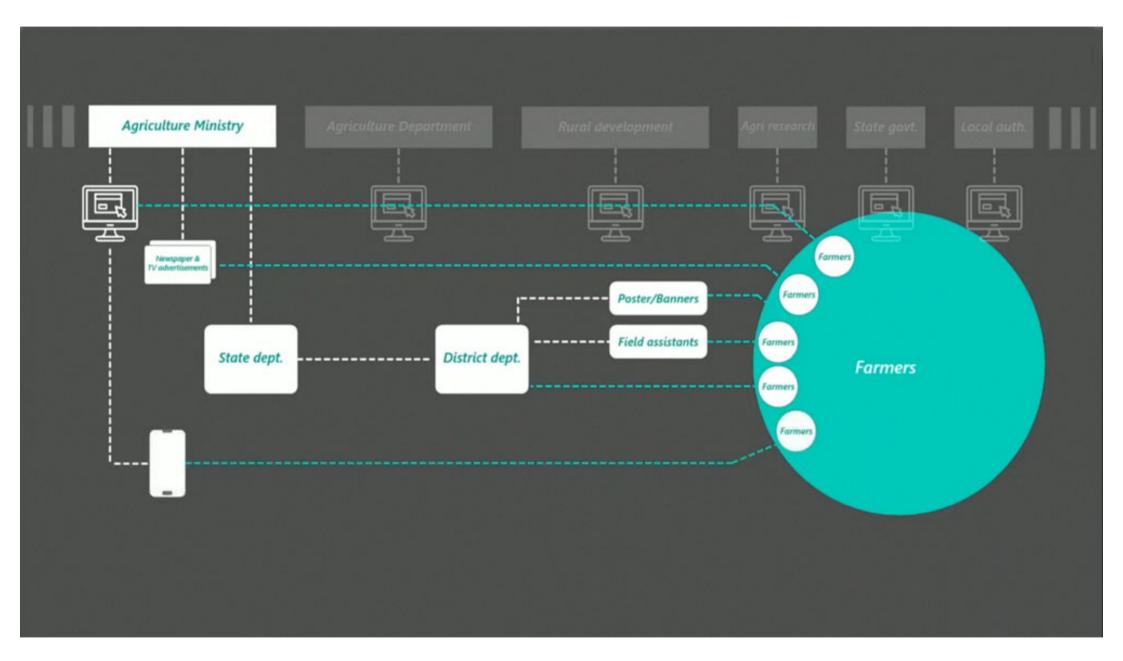


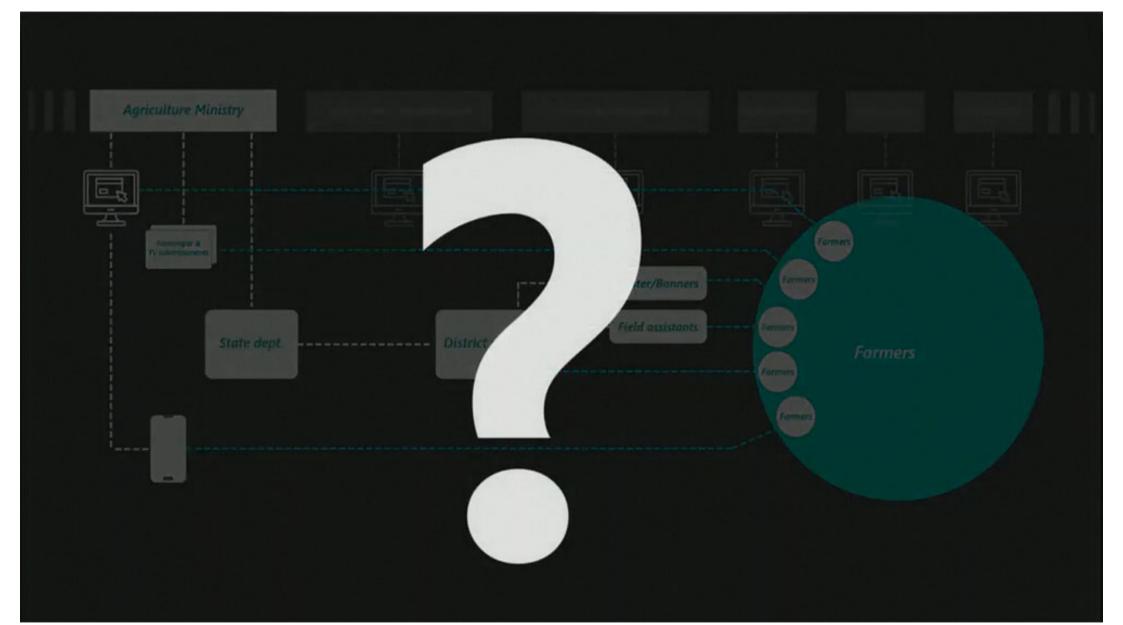












PRIMARY RESEARCH

3 Focused group discussions

22 Famers from 3 villages of Chandrapur taluka

District Agriculture Officer from Agriculture Dpt., Chandrapur

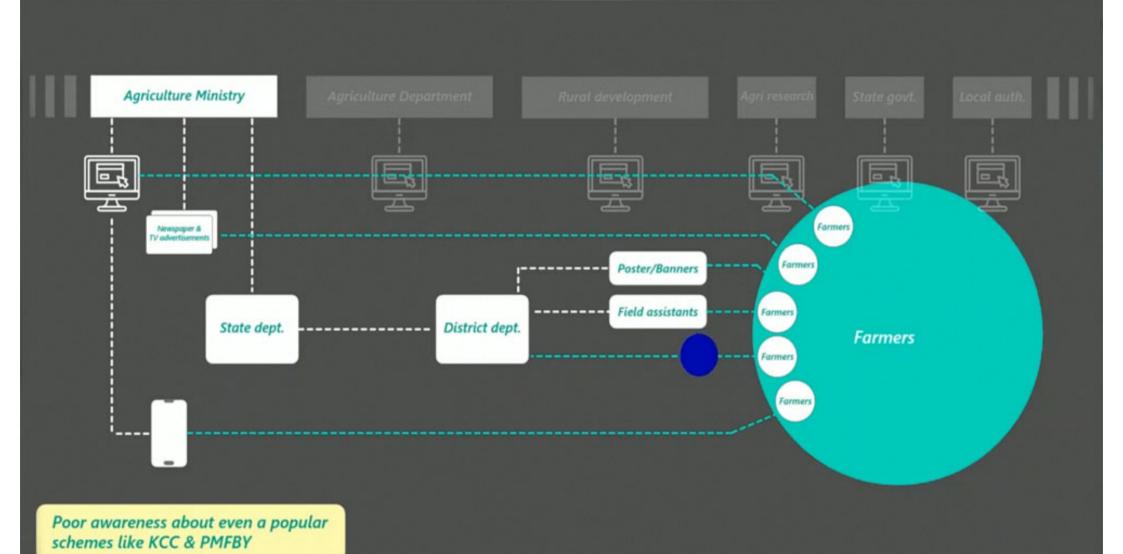
District dept.

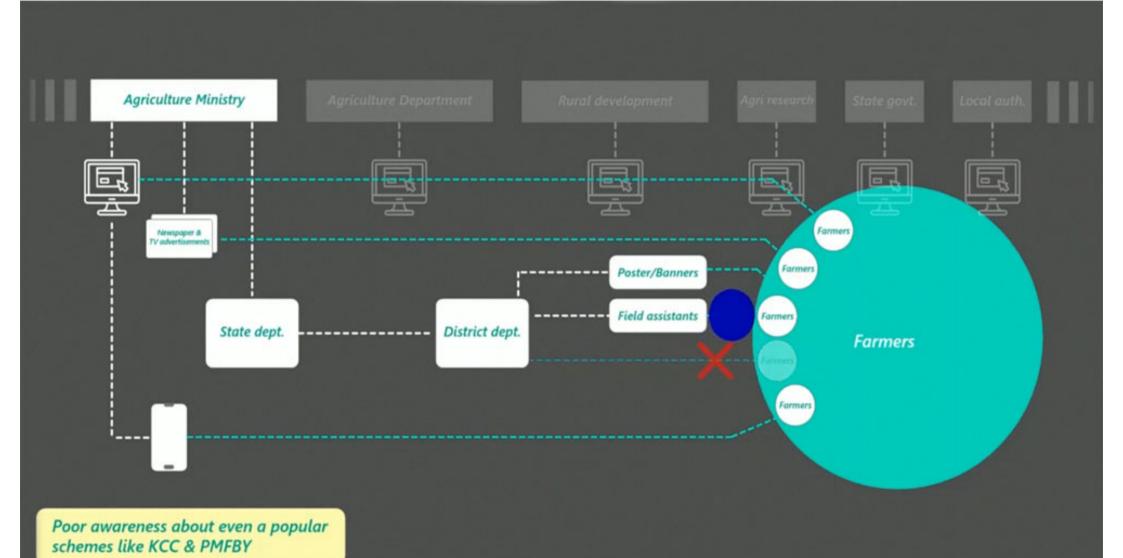


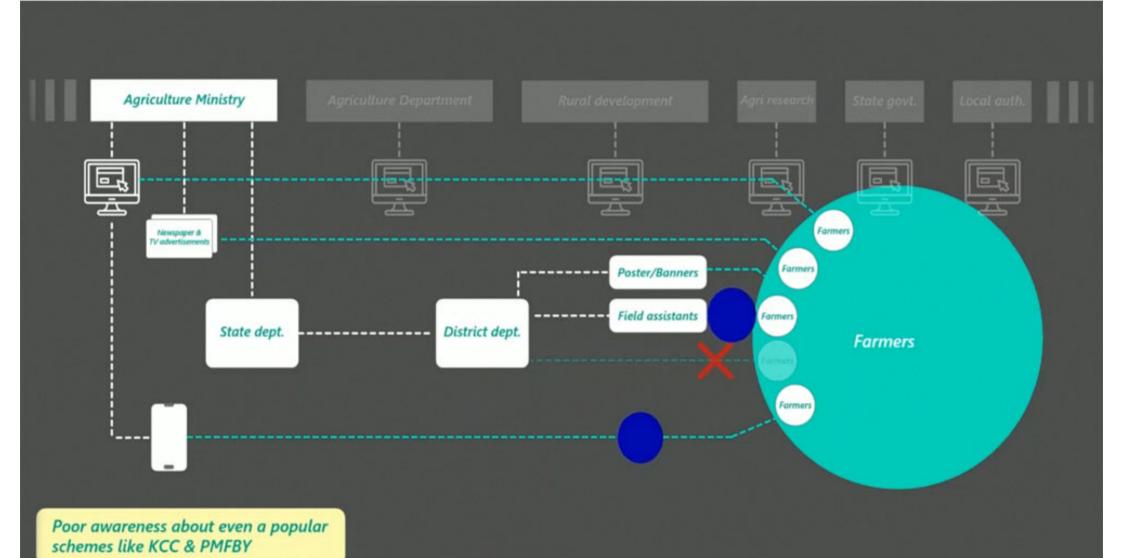


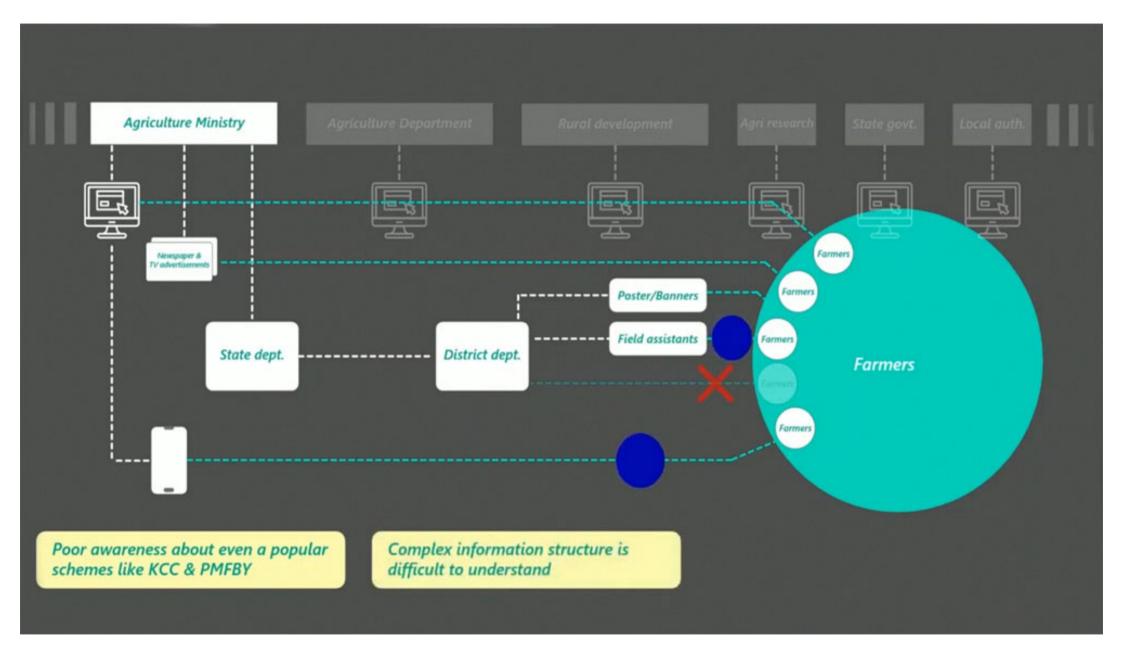


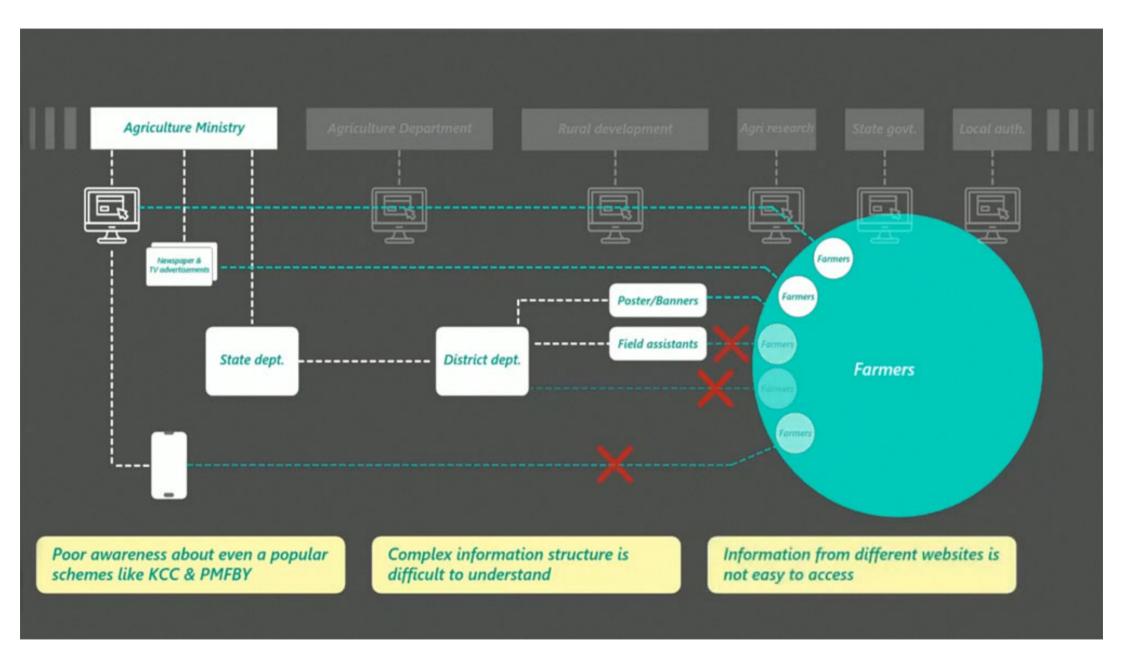
Poor awareness about even a popular schemes like KCC & PMFBY

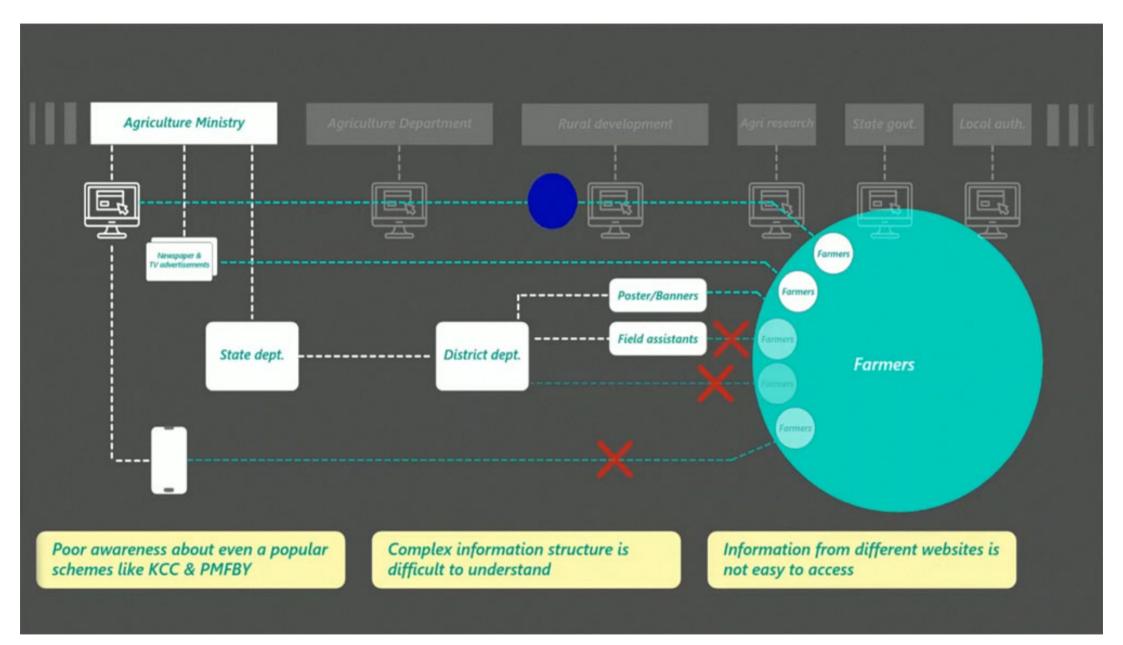


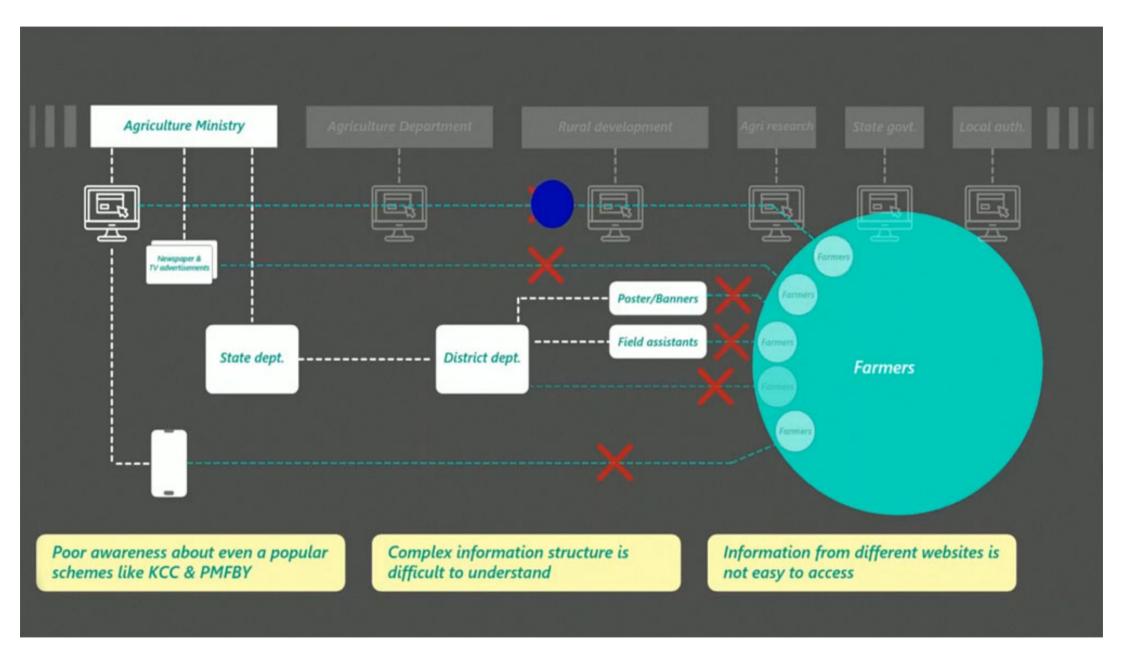


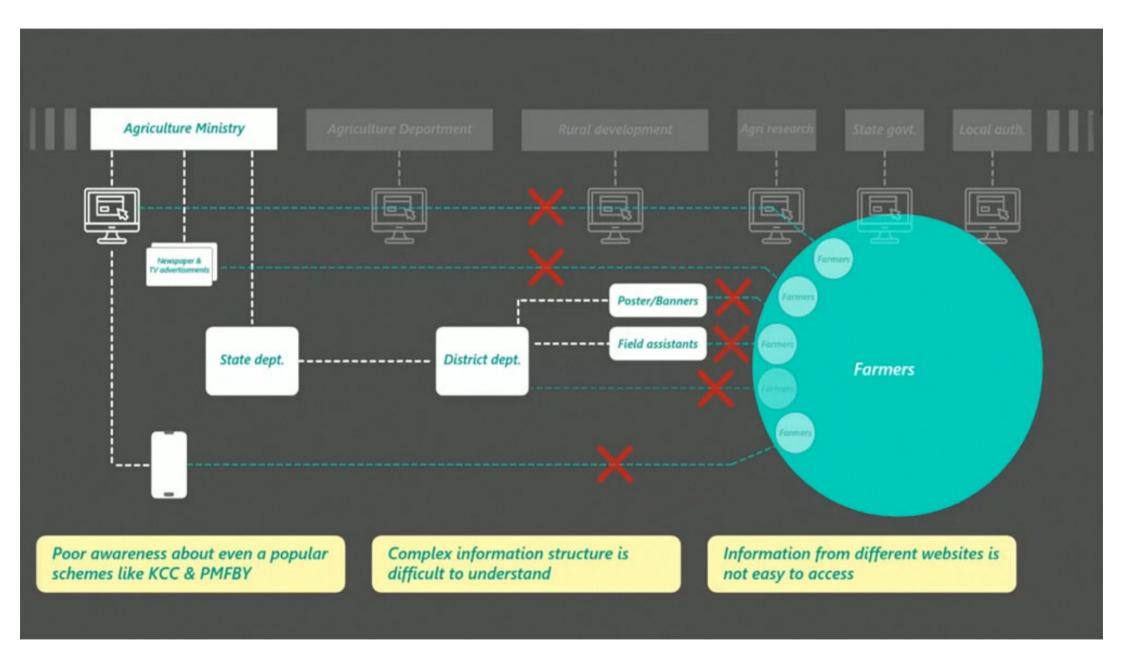












KEY INSIGHTS

Accessibility of scheme related information affects the awareness about agriculture schemes and therefore it affects their chances of getting benifitted

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Lack of unified
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Currently available information is difficult to understand and complex to interprete

PROBLEM STATEMENT



How might we help farmers to access the credible information regarding agriculture schemes without hassle and make the information easy to understand?

Consolidating the scheme related information from various souces

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Creating a concise and easy to understand information of each scheme

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Creating a concise and easy to understand information of each scheme Creating an unified platform for farmers to access this information

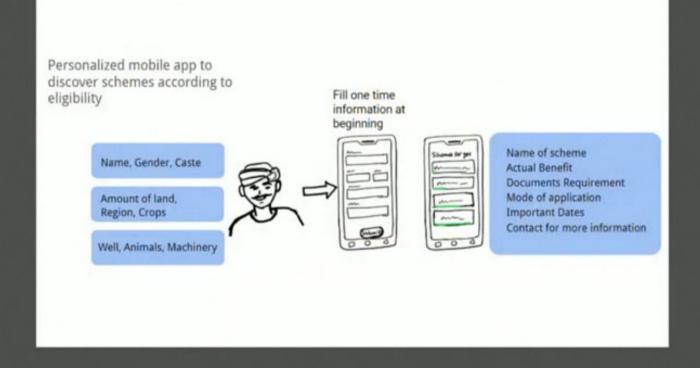
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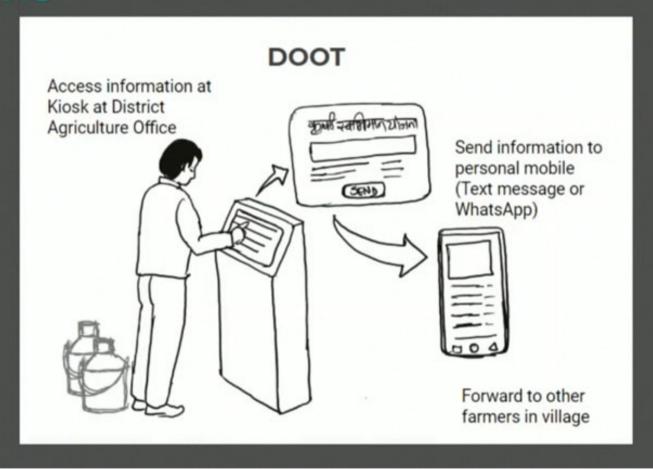
Tracking deadlines

Managing required documents Sharing information

INITIAL IDEATIONS



INITIAL IDEATIONS



INITIAL IDEATIONS

Farmers' Group

Field assistant fills information about new scheme in an App

App sends information to the group leader as a message





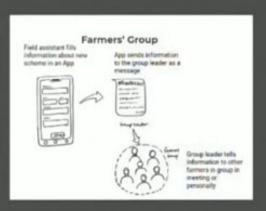


Group leader tells information to other farmers in group in meeting or personally

FEEDBACK



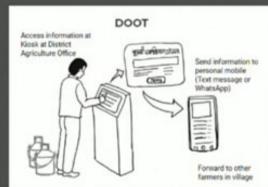




Agriculture officer at Agriculture department, Chandrapur

FEEDBACK







Could work, but keeping a volunteer motivated will be difficult

FEEDBACK







Designing a mobile app



Website built using web technologies but acts and feels like a mobile app

Website built using web technologies but acts and feels like a mobile app

Discoverable in search engines

Works in web as well as mobile phones

Works on very less connectivity or no connectivity also

Doesn't need to be installed on phone device but still can act as an installed app

Can be shared easily with an URL

Website built us but acts and fee 70-80 Schemes per year for farmers

Discoverable in search engines

Works in web as well as mobile phones

13-15 schemes for individual farmer

Works on very less connectivity or no connectivity also

Doesn't need to be installed on phone device but still can act as an installed app

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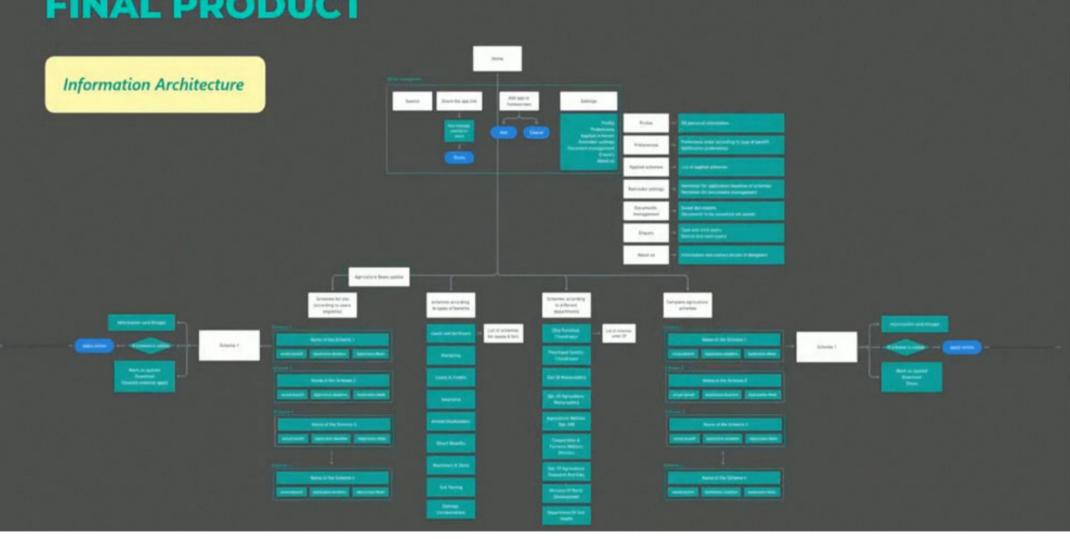
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FINAL PRODUCT



FINAL PRODUCT

Low-Fidelity wireframes

















FINAL PRODUCT



आपल्या कृषी योजना

Our agriculture schemes

High-fidelity prototype created in Adobe XD

Prime goal is to see schemes for him/her



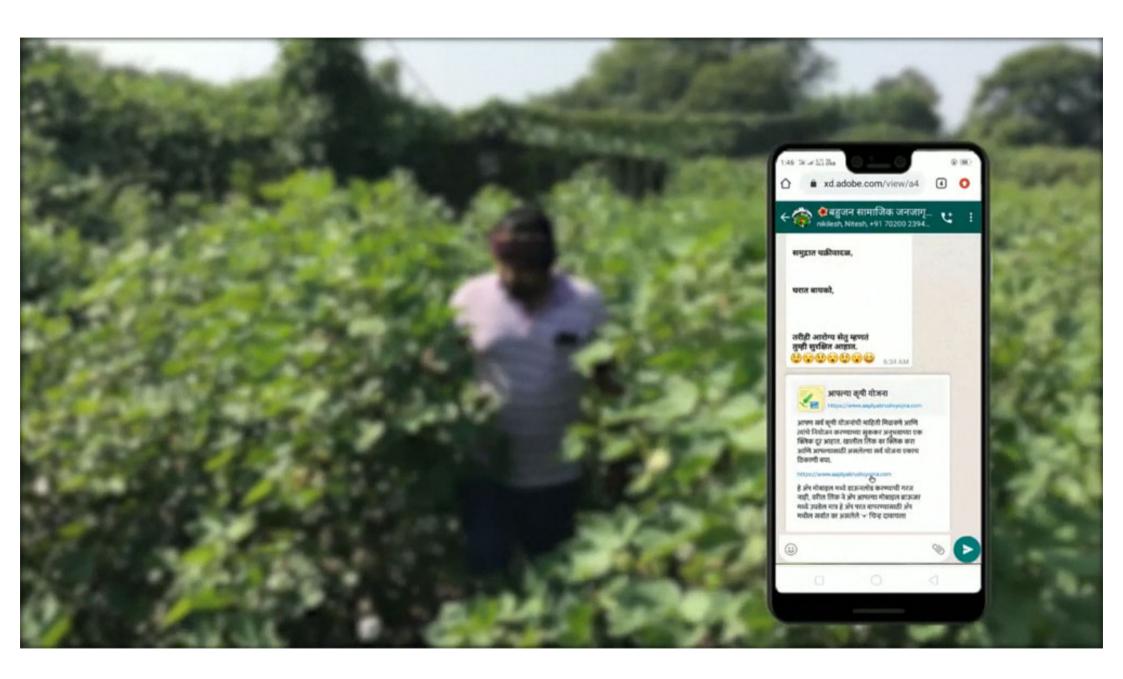
List of schemes should appear on top

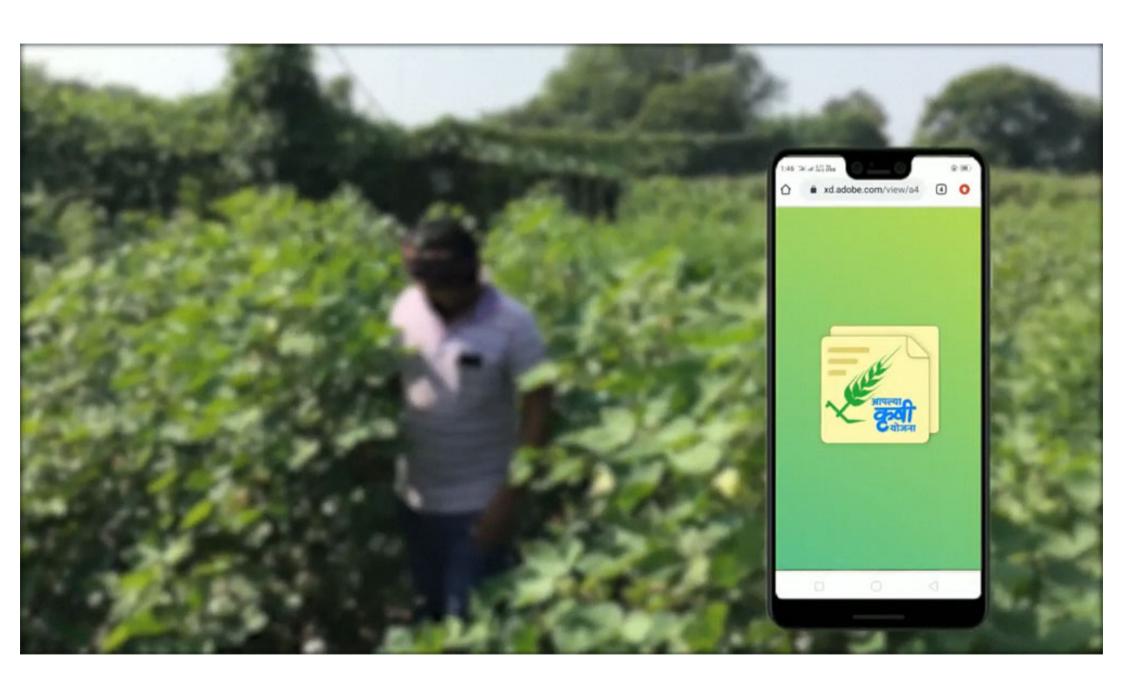
Navigation should enable user to switch to different types of schemes easily

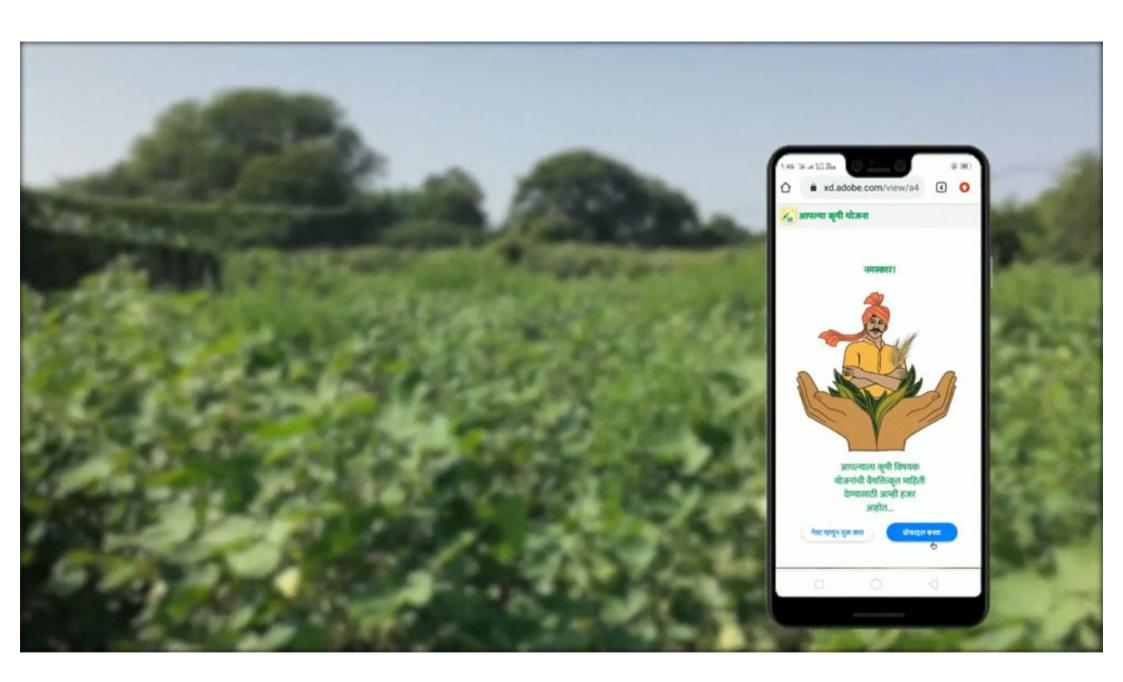
Studied the scheme information of some schemes and understood what are the important attributes

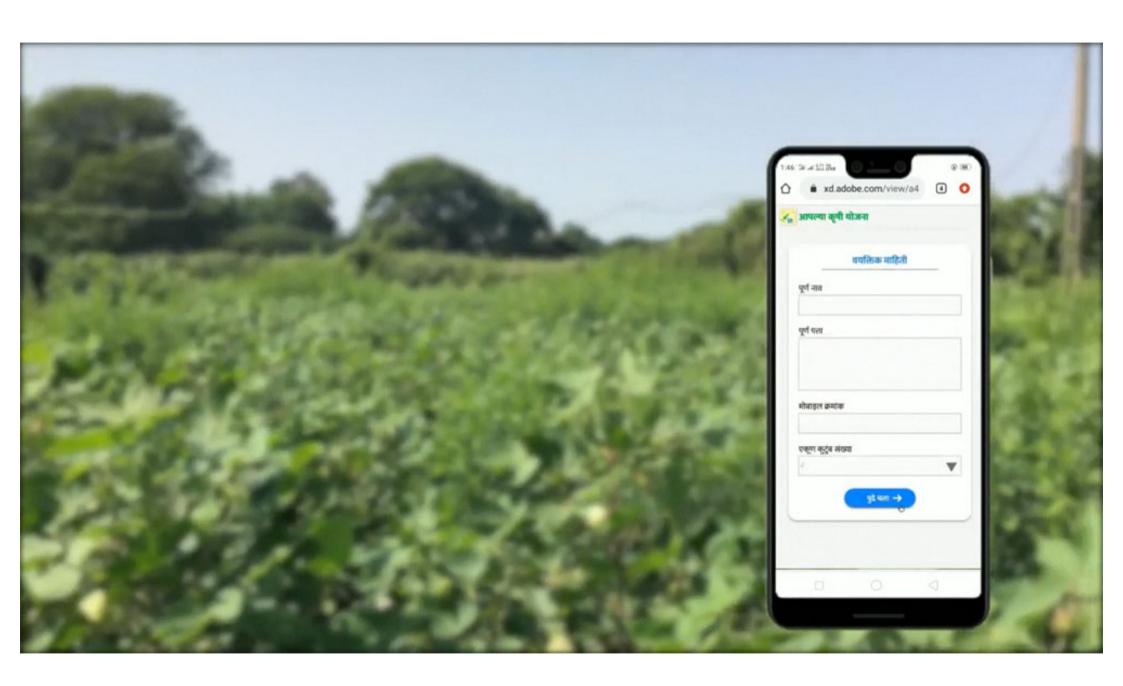


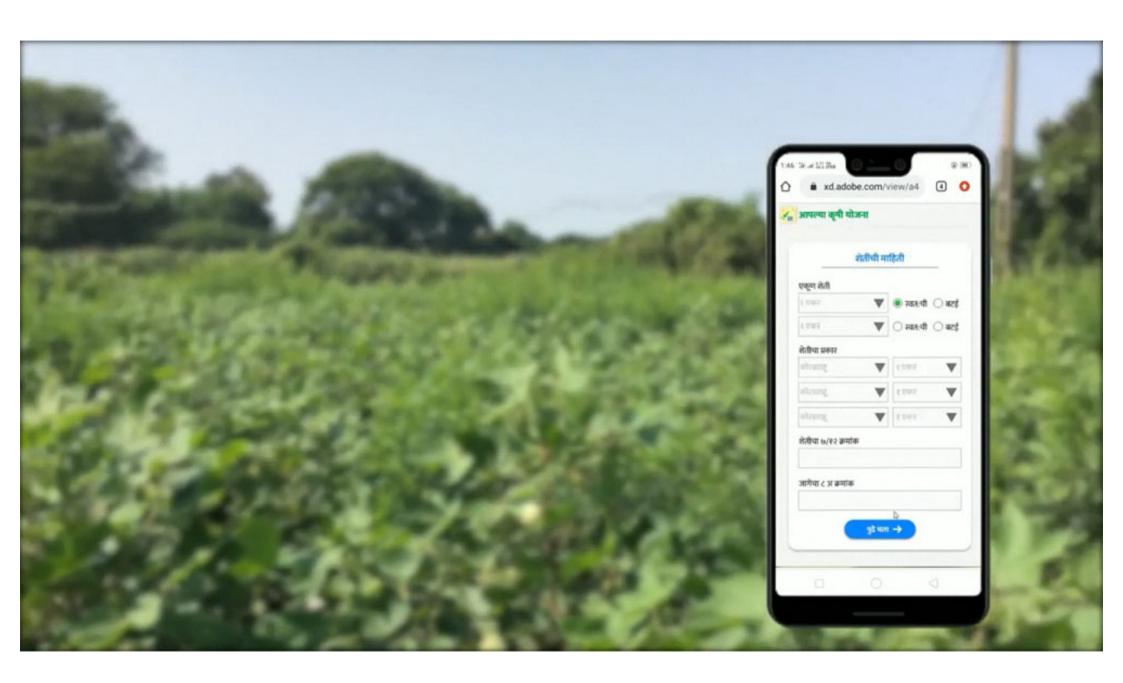


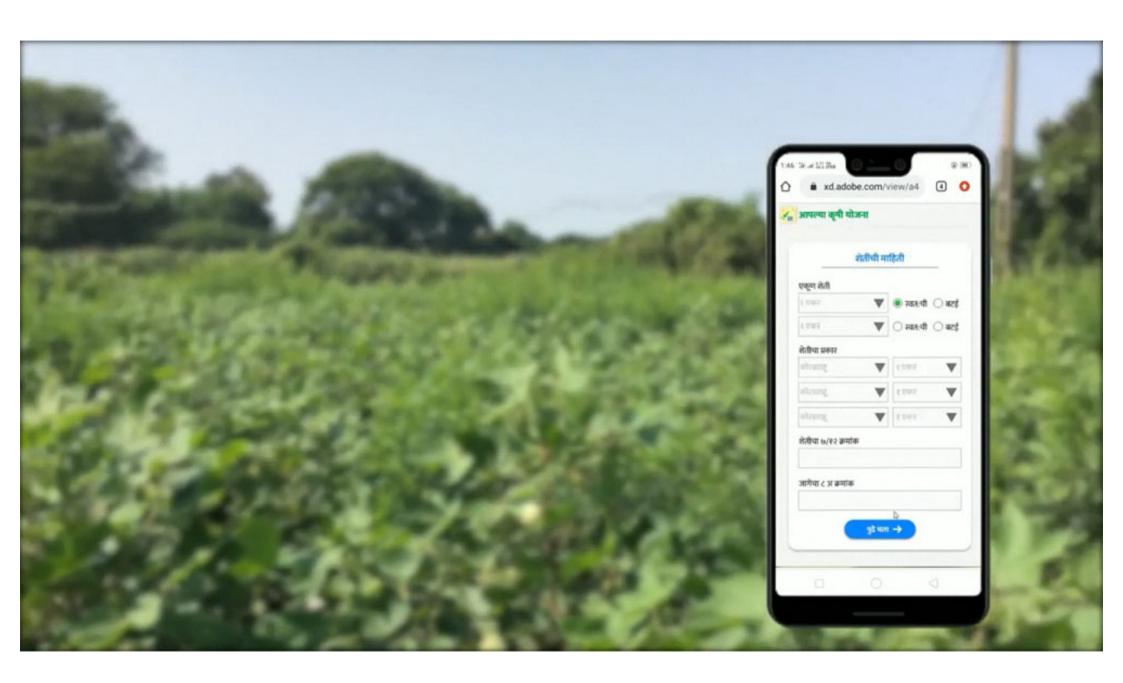


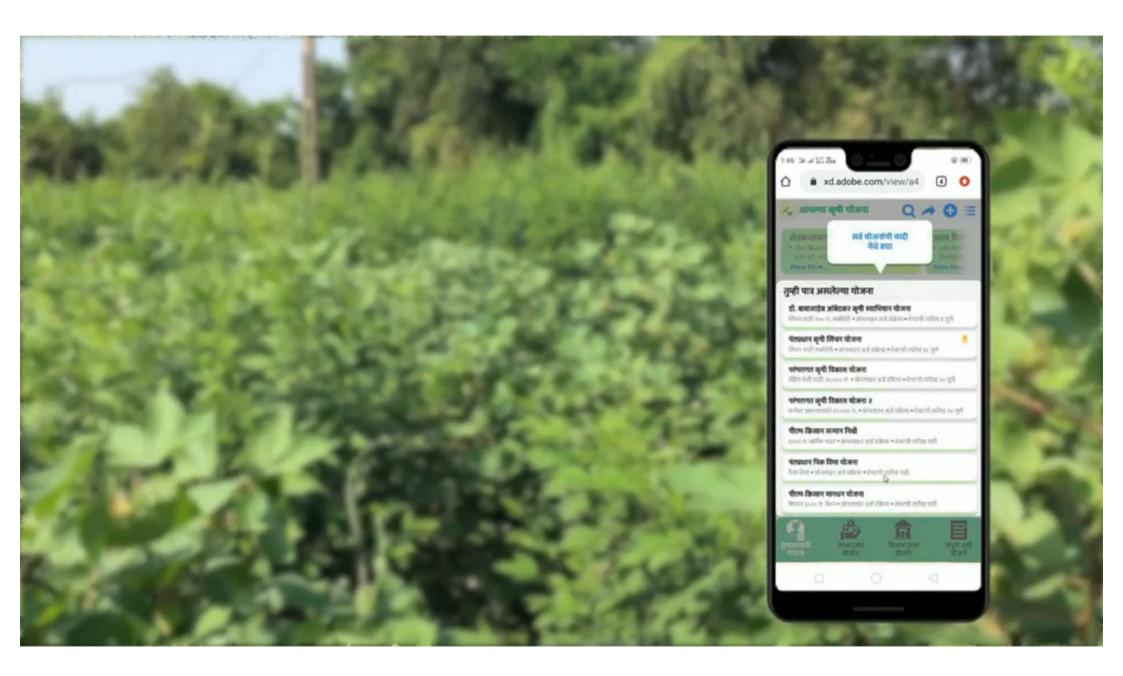


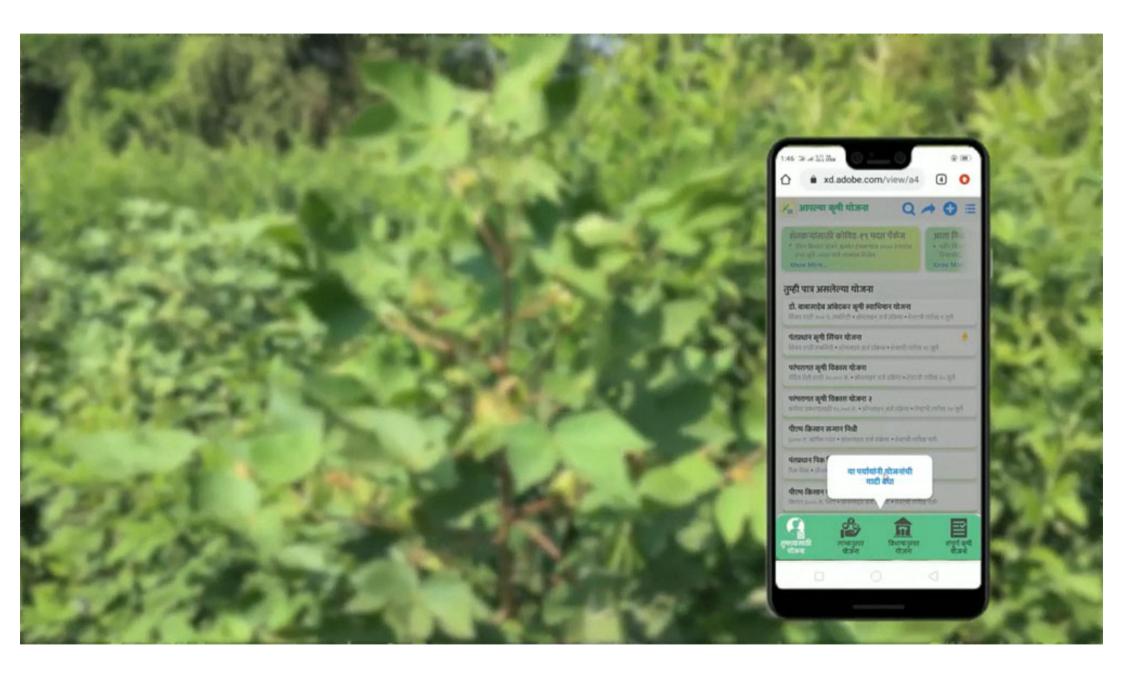


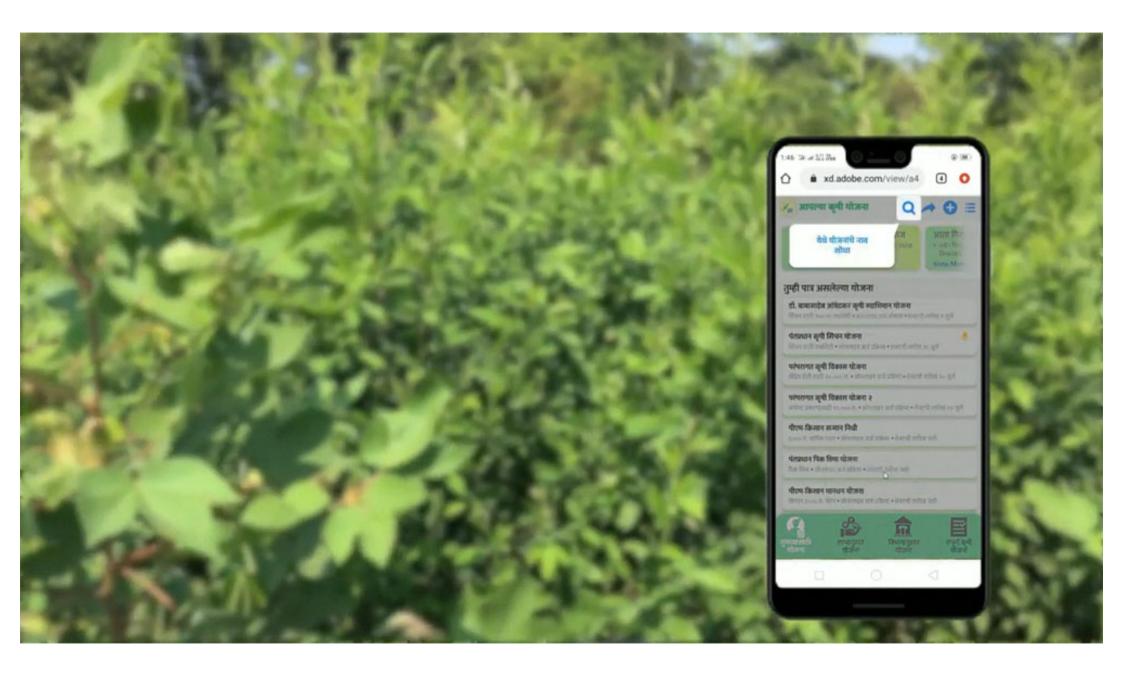


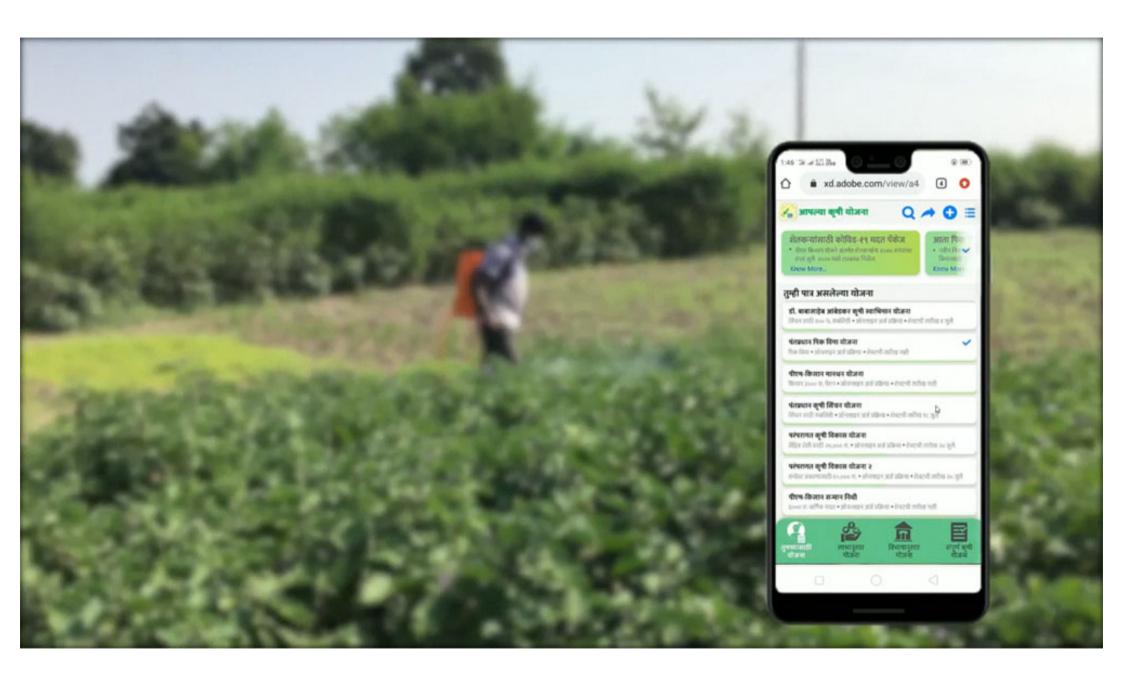


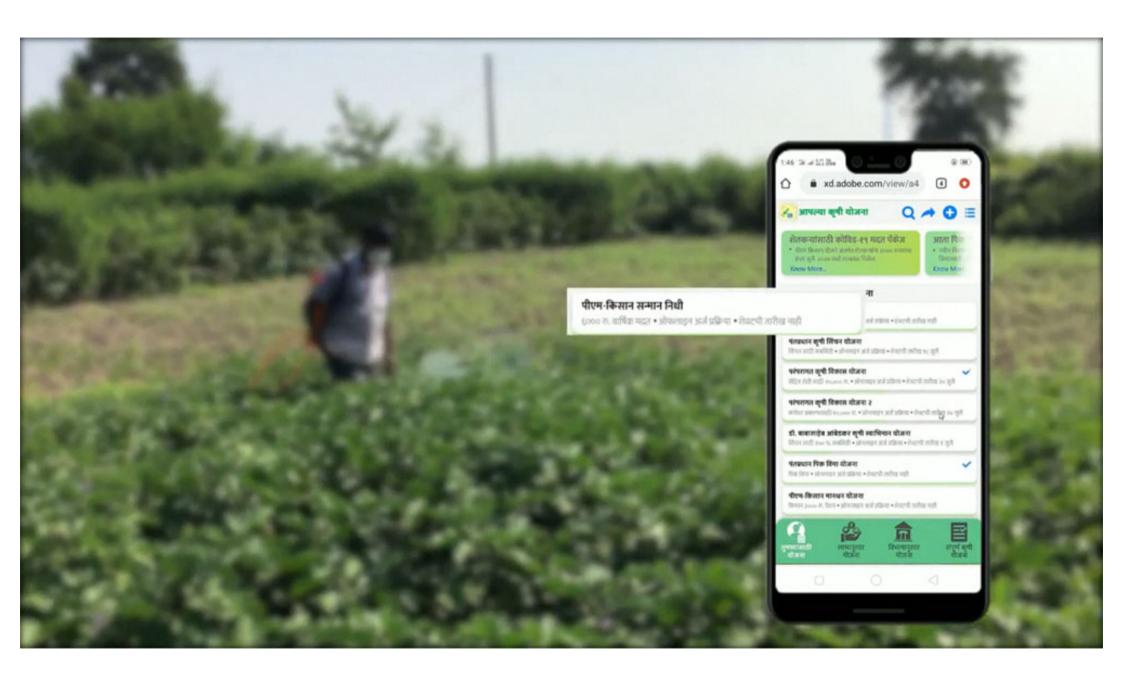


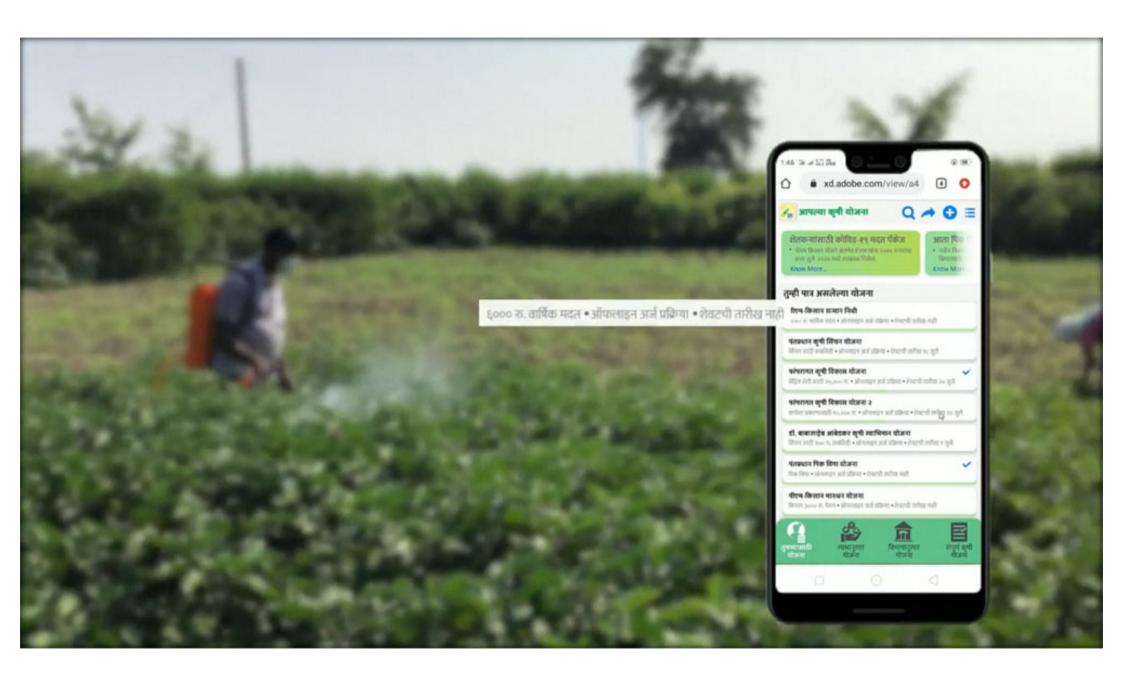


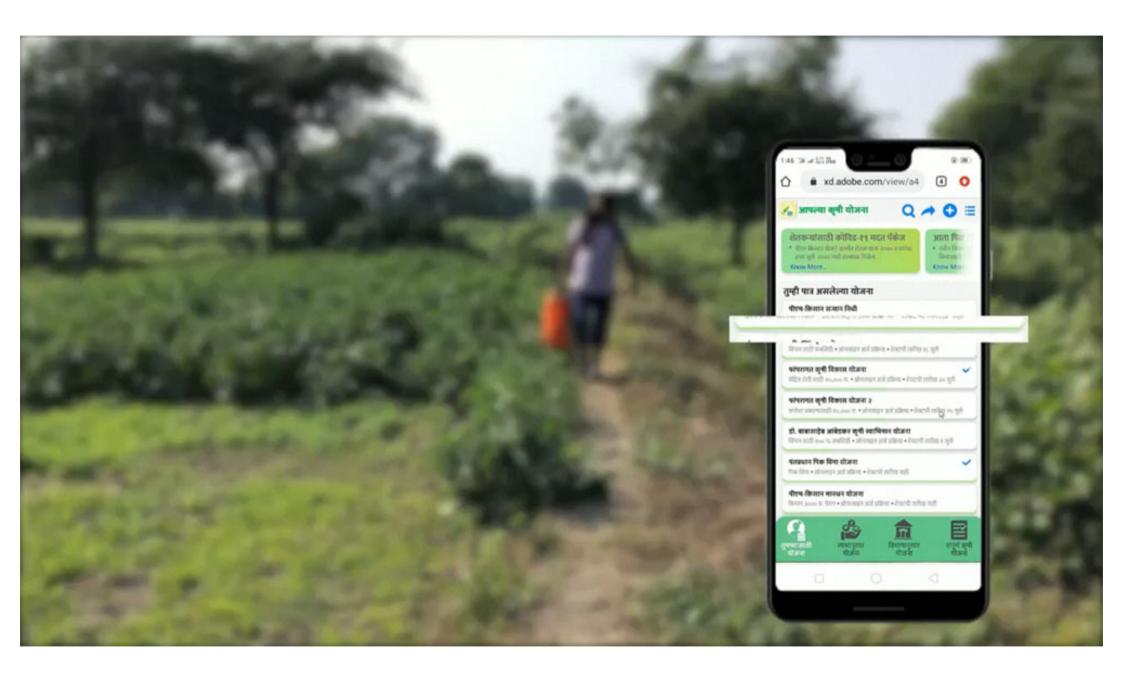


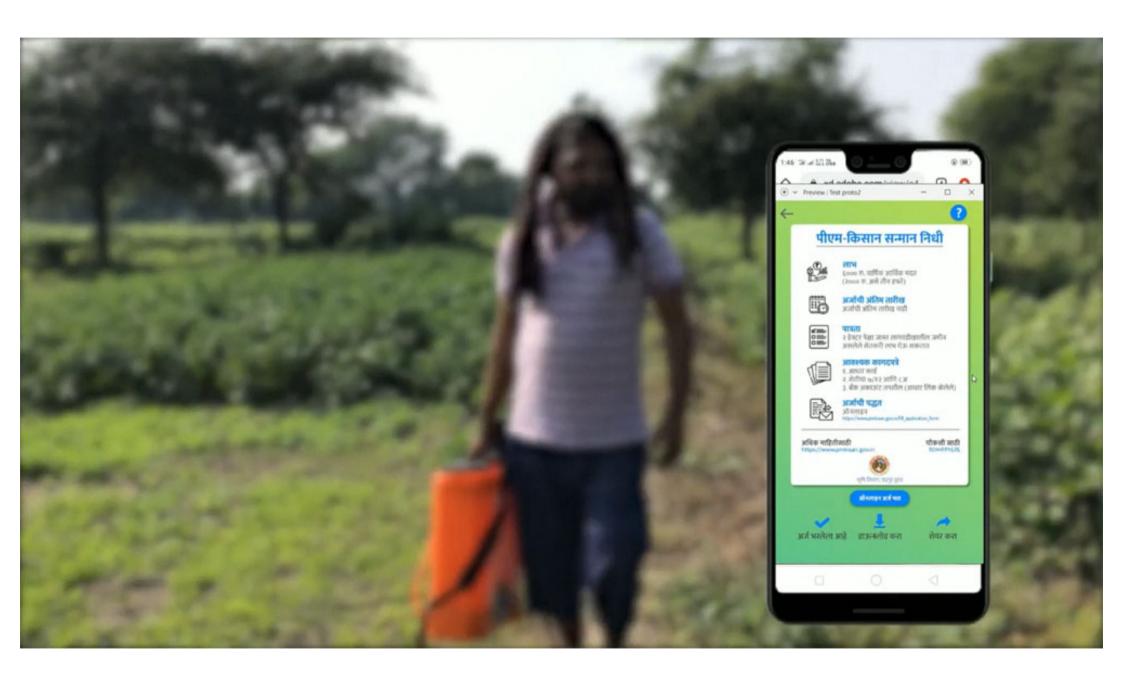


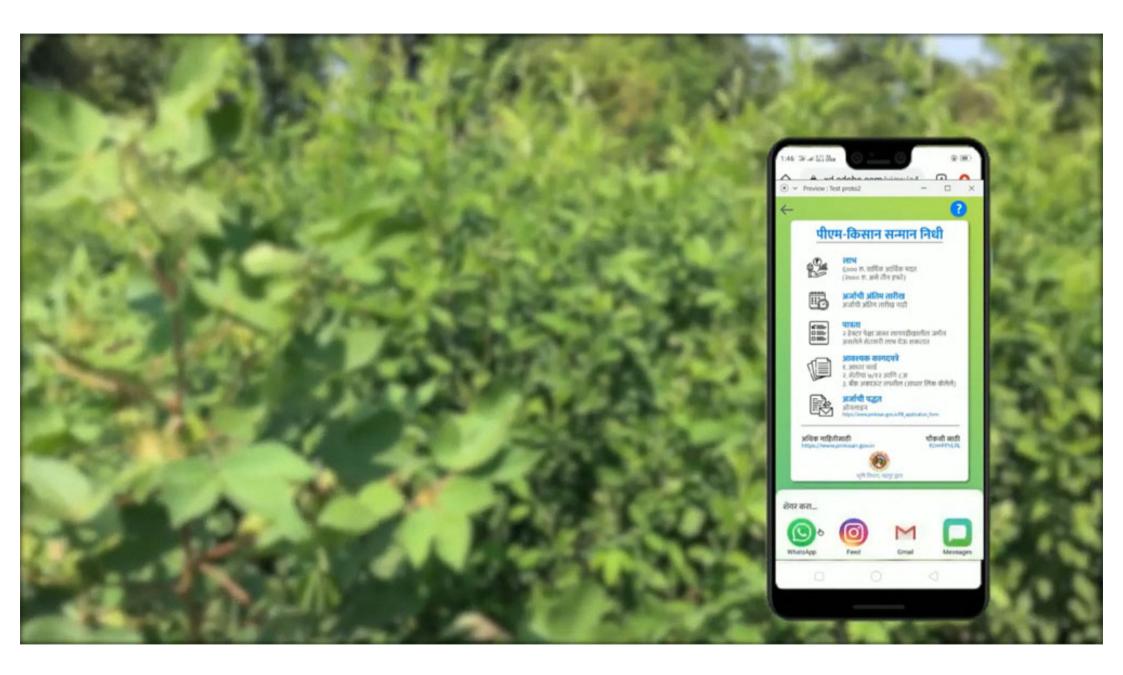


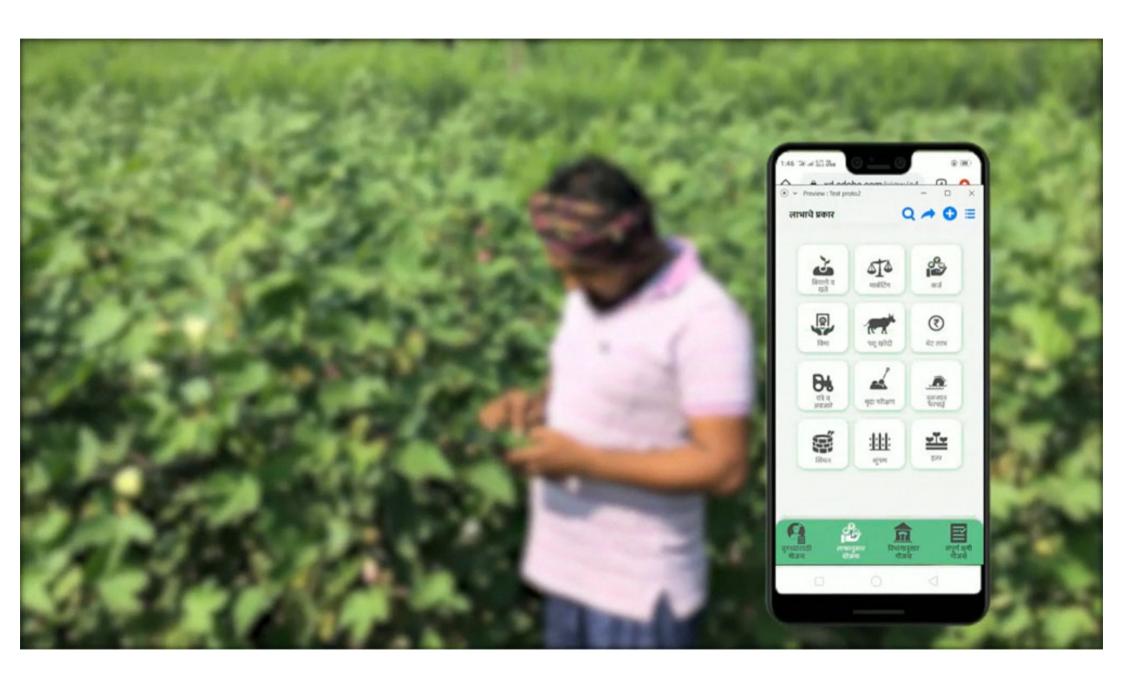


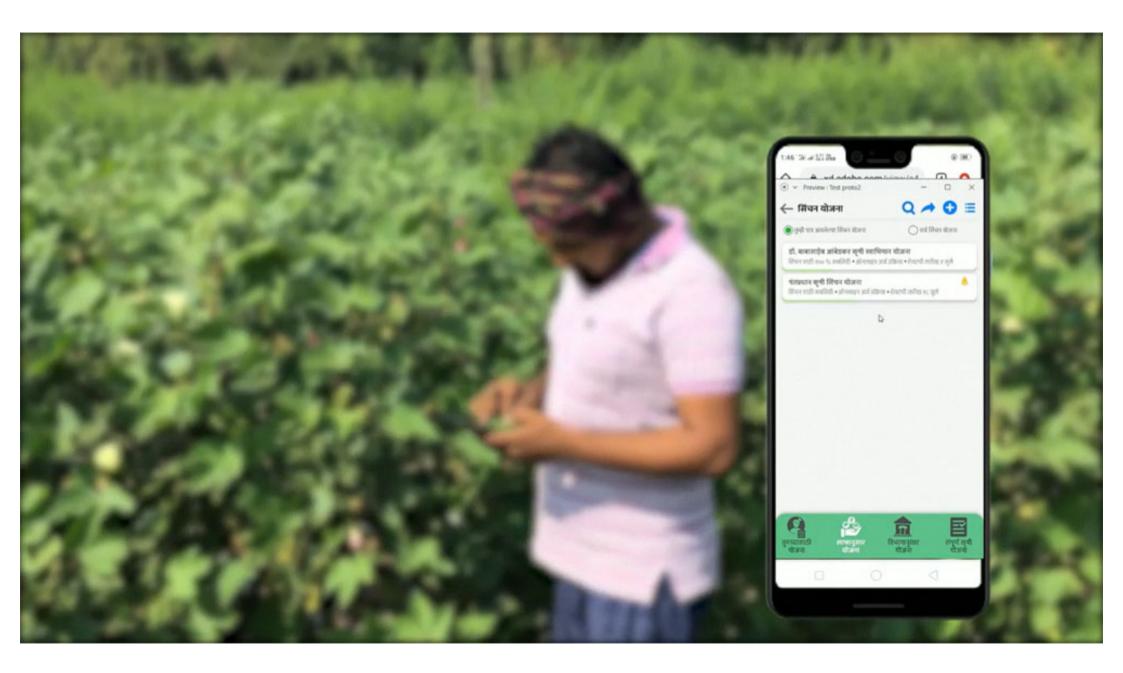


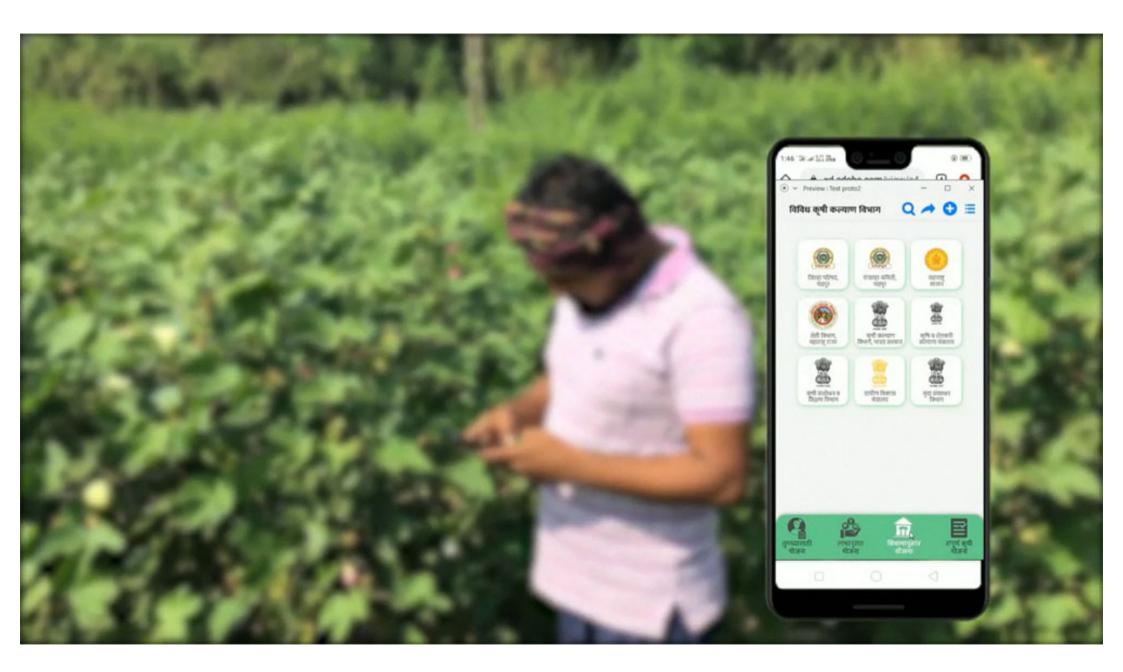


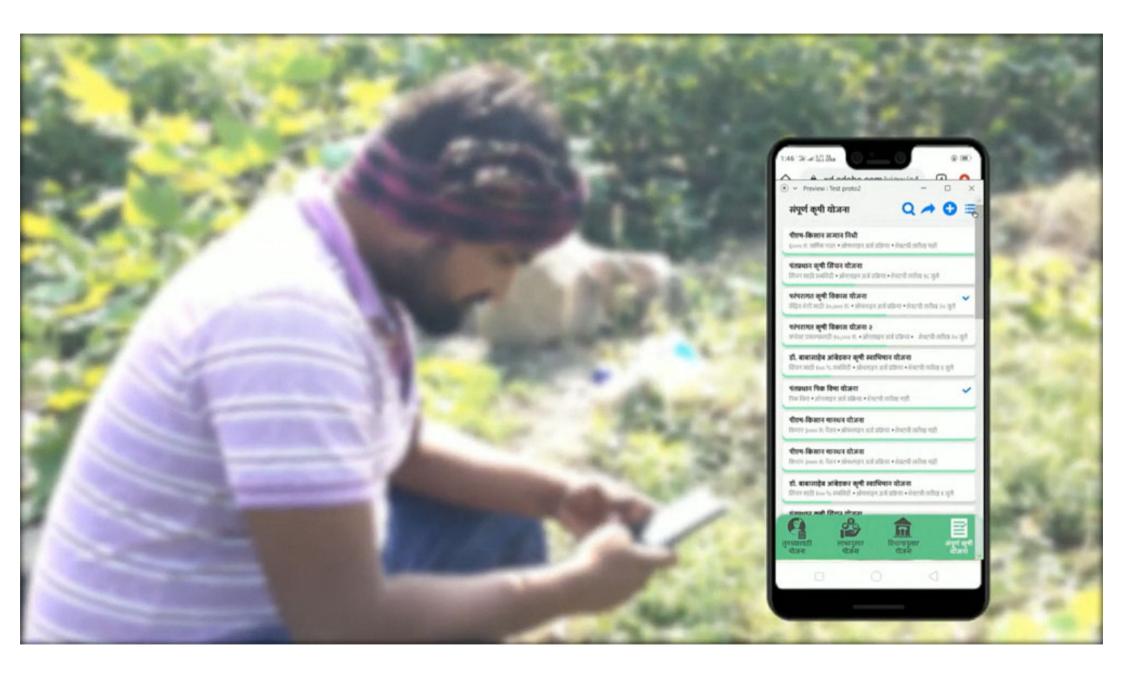


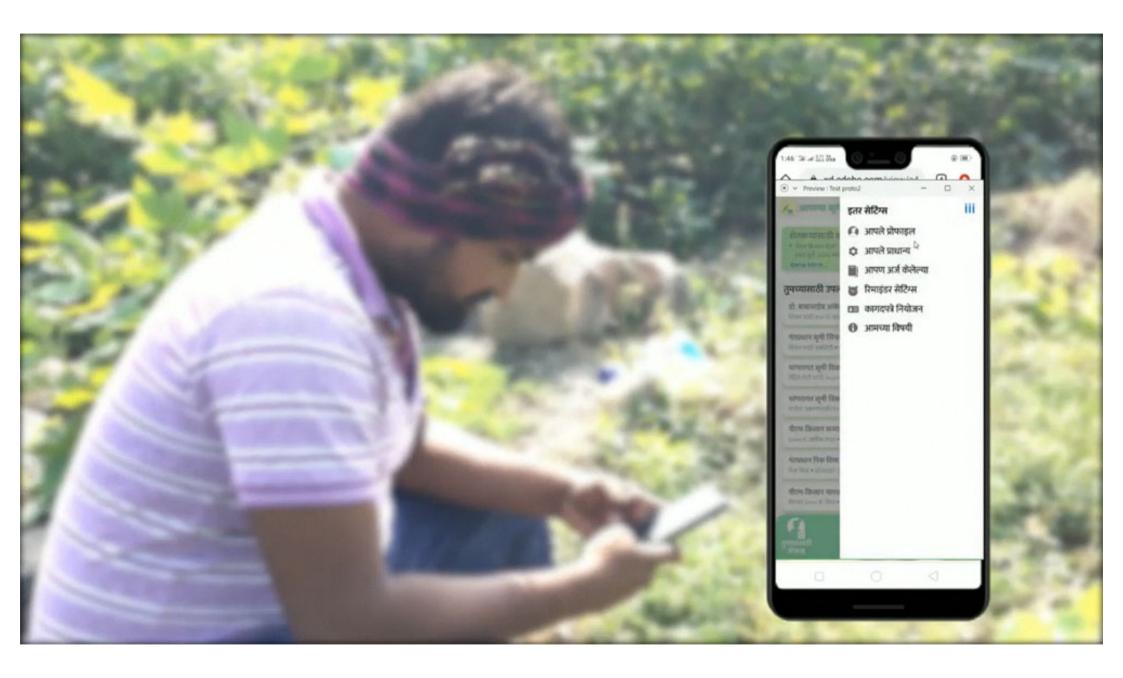


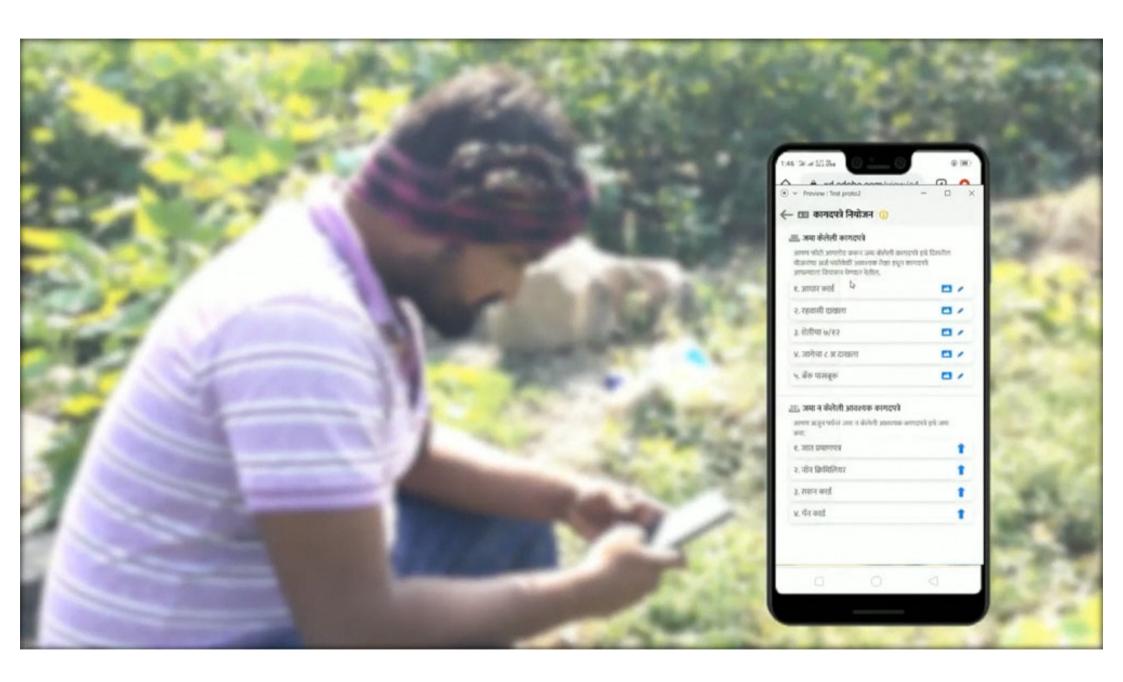


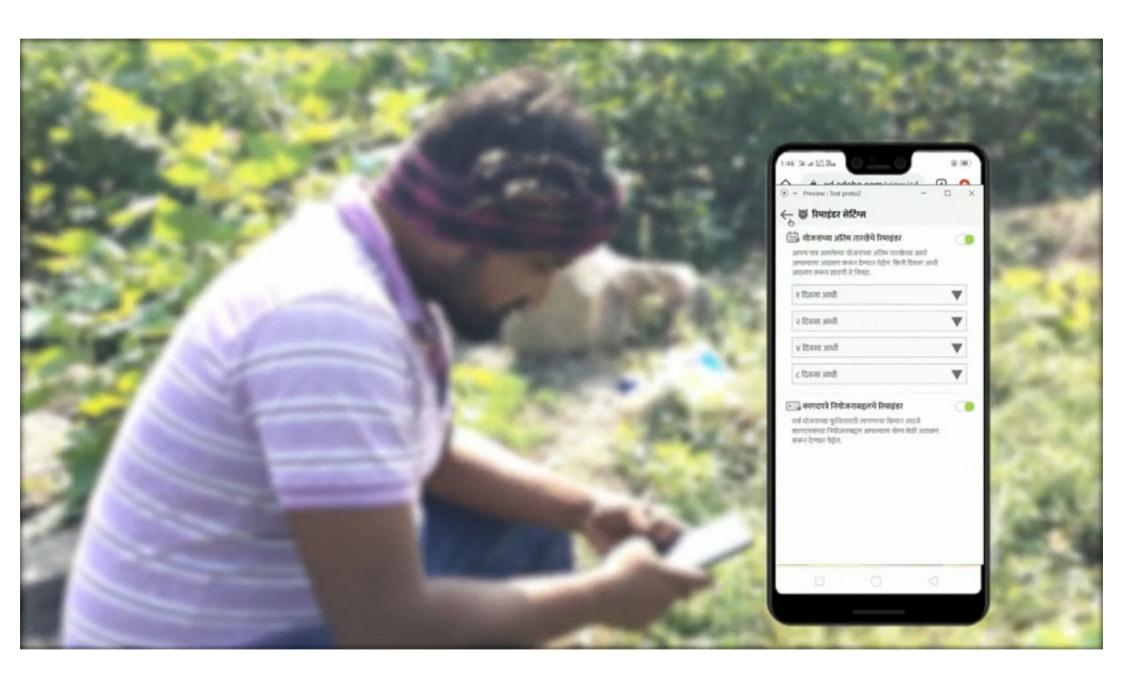


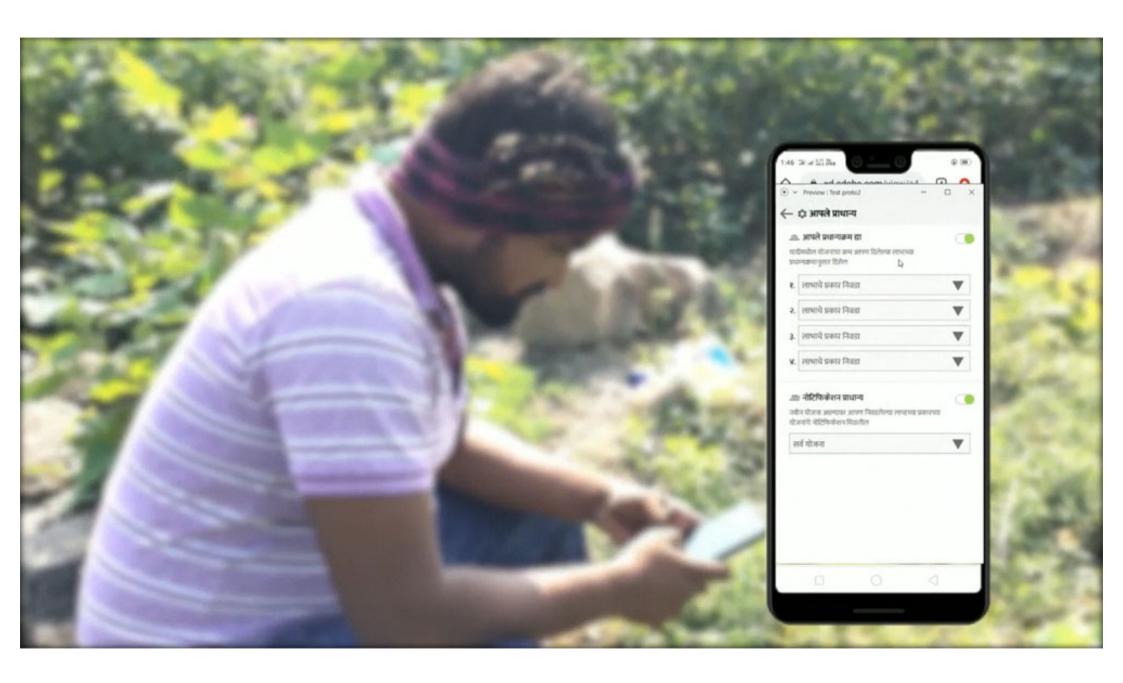


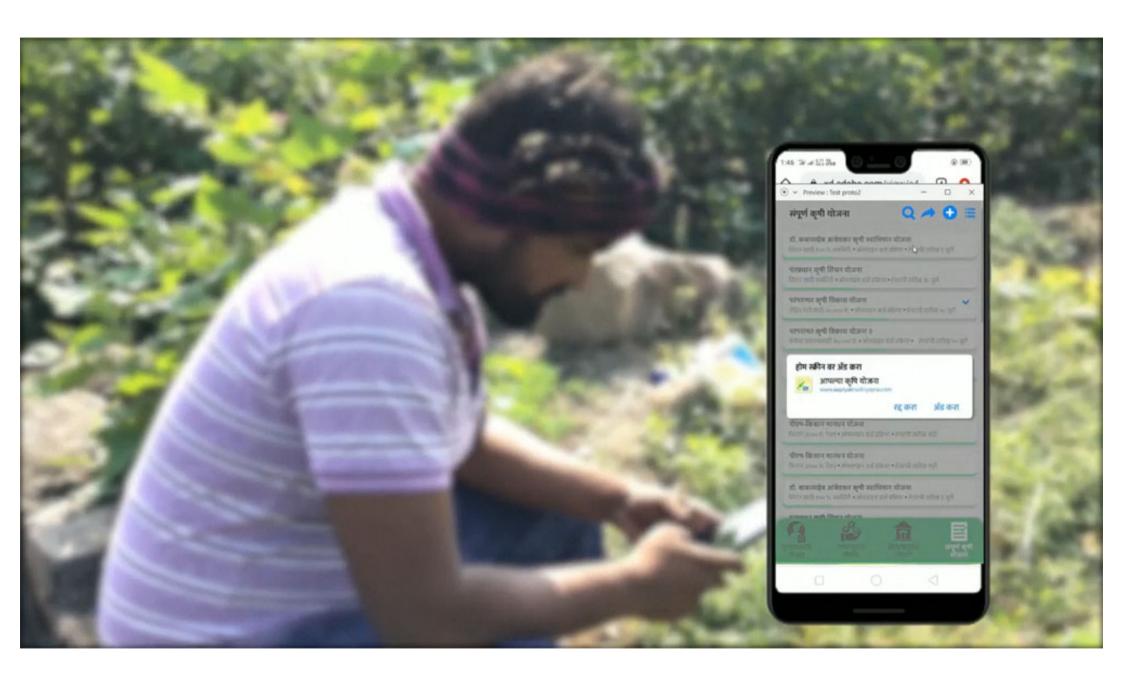


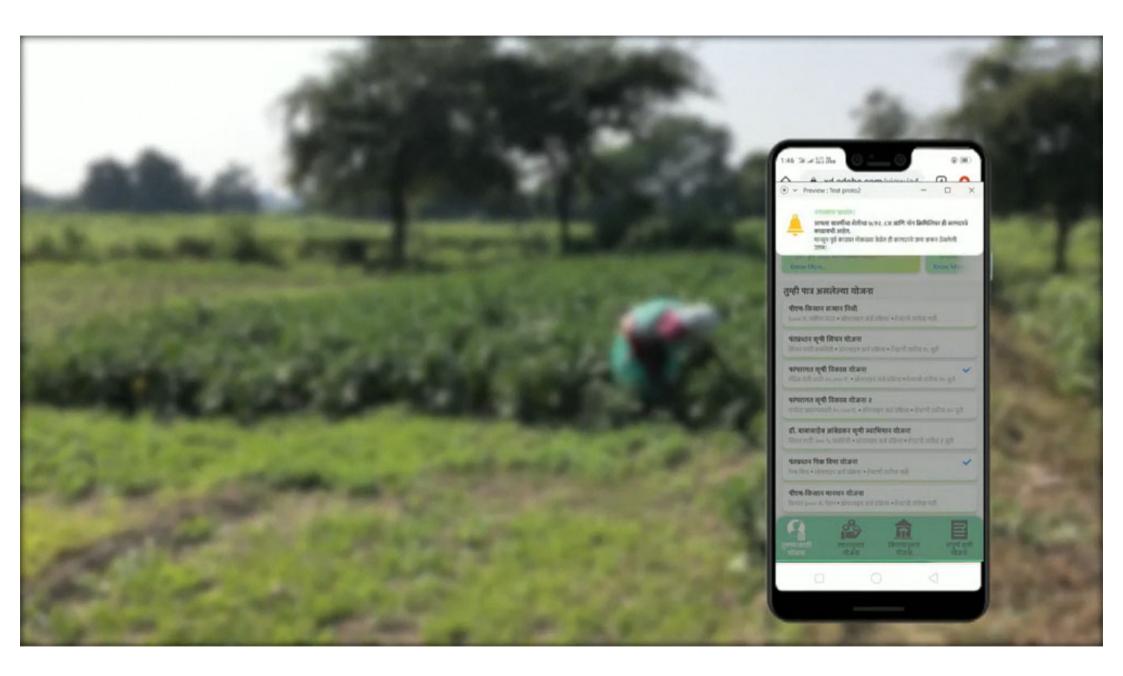


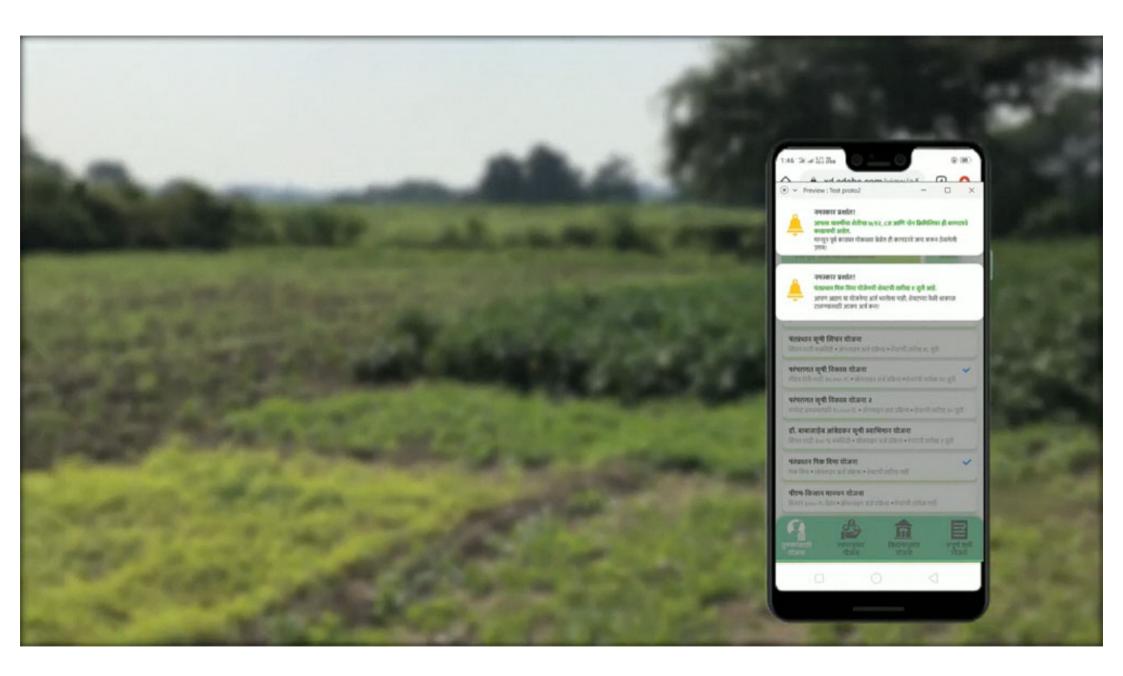


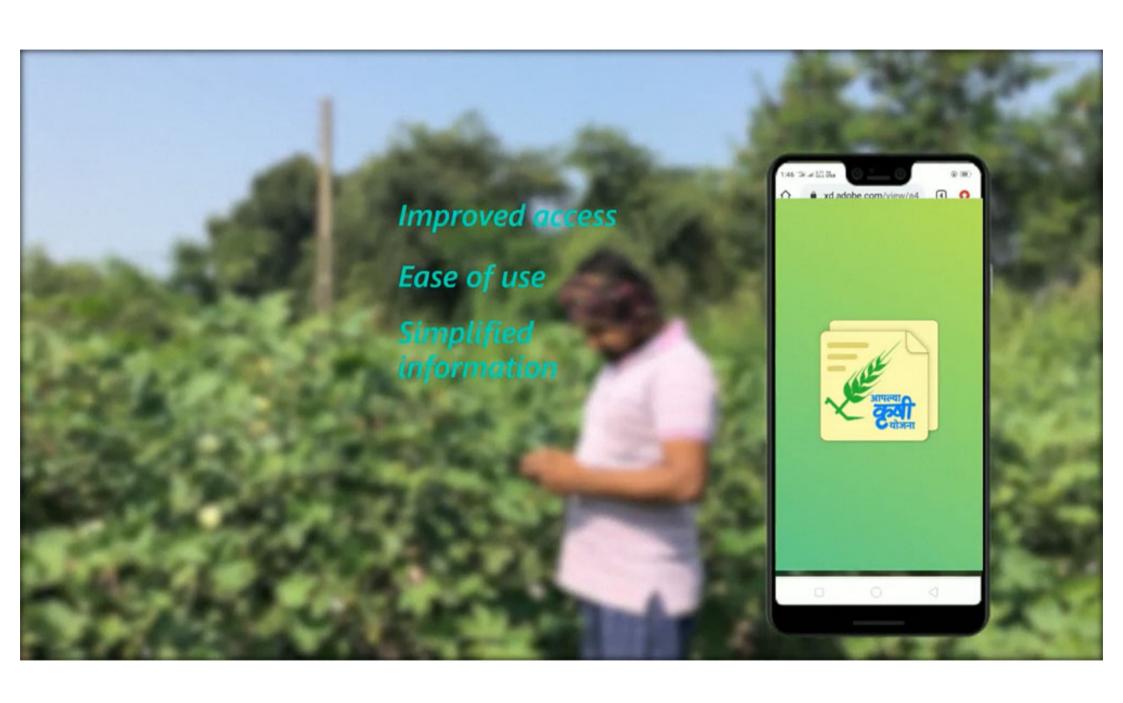


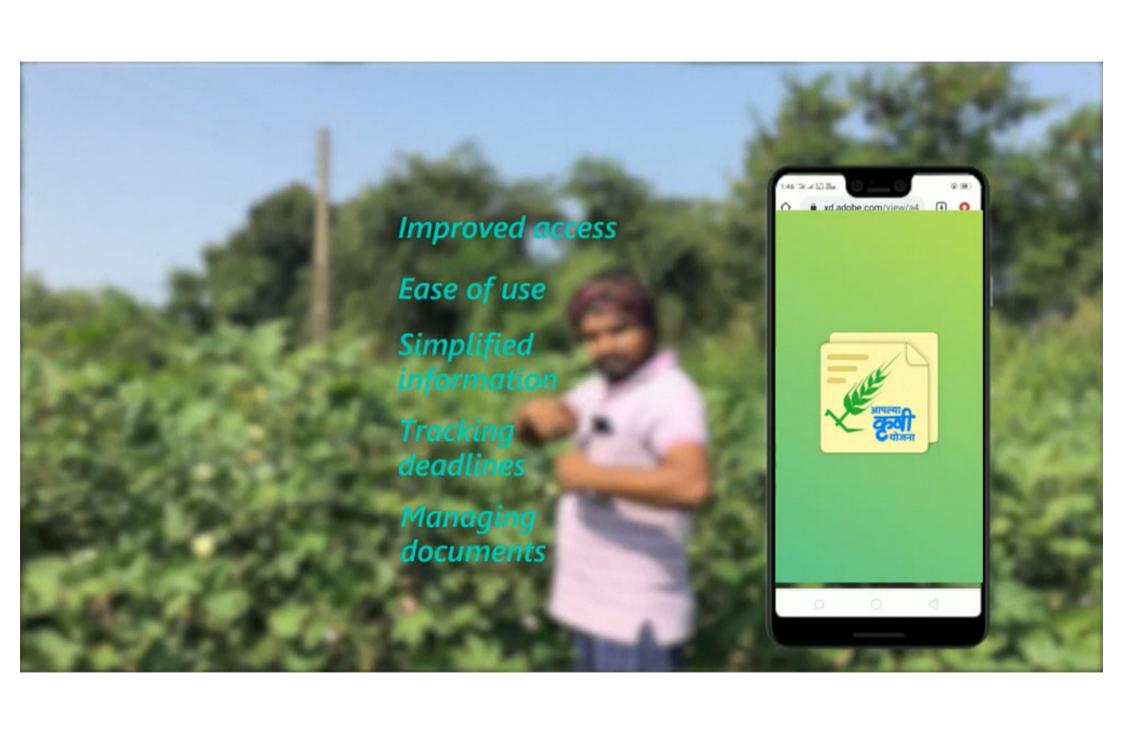


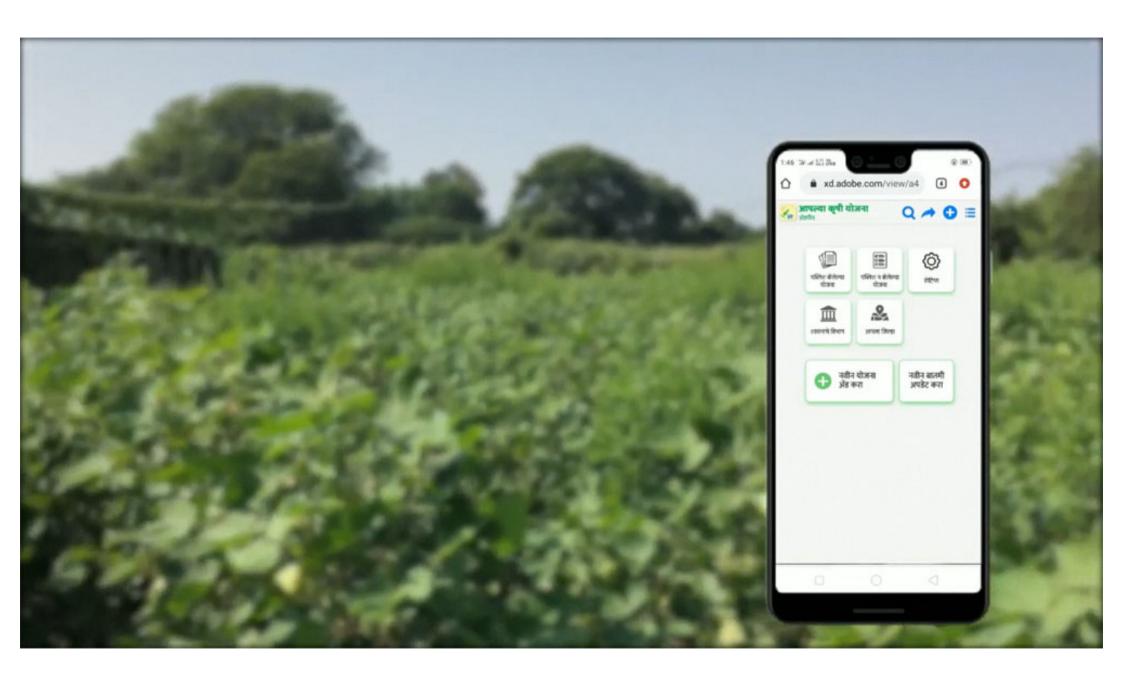
















आपल्या कृषी योजना

Our agriculture schemes

Virtual evaluation

6 Participants, Male, 25-45 year age group

Chandrapur Taluka

farmers and all of them have fairly good experience of using a smartphone and mobile applications



Objective of the evaluation:

Effectiveness

To test whether the information provided by app is easy to understand than the information from official pdf

पीएम-किसान सन्मान निधी



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Objective of the evaluation:

Effectiveness

To test whether the information provided by app is easy to understand than the information from official pdf

Learnability

Is it fairly easy to learn? How long does it take them to learn the app?

Usability

Is the app usable by user?
Is it easy to use or difficult?

Perception

To test how the app is perceived when users use it for first time



Results

Effectiveness

"I can easily understand this and now I can confidently tell anyone about this scheme!"

"Can I send this app to my friends?"

Ease of understanding
Eager to use the actual app



Results

Effectiveness

"I can easily understand this and now I can confidently tell anyone about this scheme!"

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Ease of understanding
Eager to use the actual app

Usability

"It's simple, I can use it, Also because of Marathi it's easier!"

Easy to use



Results

Learnability

"Once I've gone through it, I've understood fairly everything!"

"I can teach this to my father also..."

Can be learnt in one usage

Perception

"Can I share this image to my friends?"

"Green colour makes it feel comfortable!"

Perceived as intended

DISCUSSION

The reviews of experts and results of user testing shows promise in the product

The system of authorities was not completely taken into picture due to limitations of scope of this project

It can be scaled for the wide farmer population by changing the content, language and the context

THANK YOU!