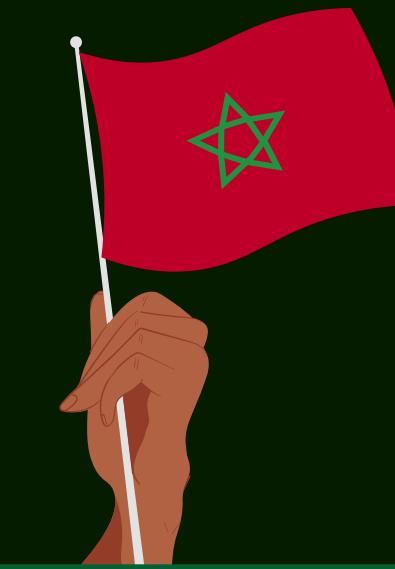




Smart  
الزراعة



Smart  
البيئة



# PROBLEM STATEMENT



Smart  
فلاج



• لحسن الزقيمي : فلاج  
المغرب الأخضر

الفلاحة المعيشية

المغرب  
الأخضر

MEDI 1 TV



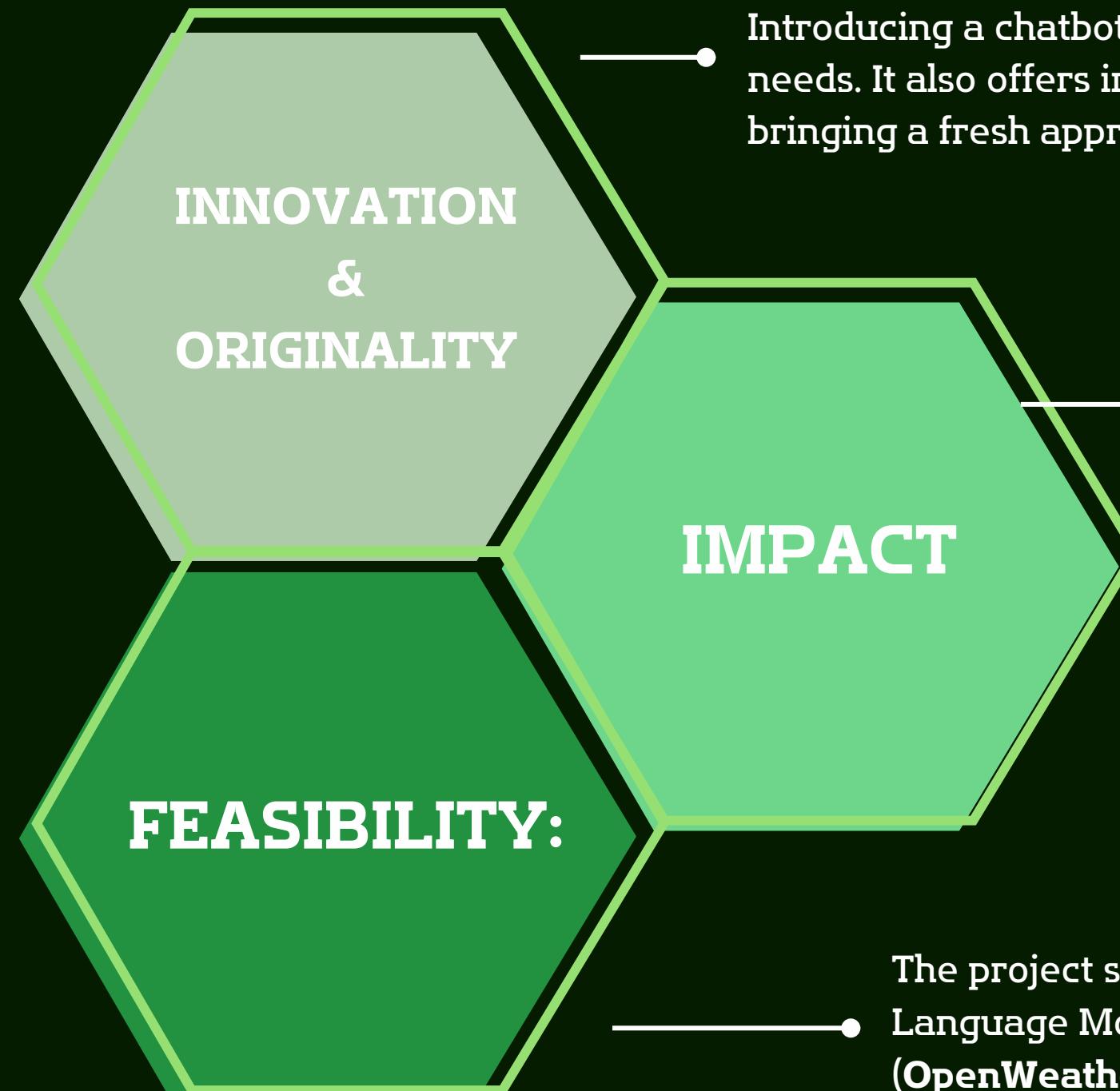
Smart  
الماء

# PROPOSED SOLUTION



Our solution





Introducing a chatbot in Moroccan Arabic tailored to farmers' needs. It also offers insights and personalized recommendations, bringing a fresh approach to traditional agricultural assistance.

Its potential to empower farmers with real-time insights and personalized recommendations, fostering informed decision-making and potentially increasing agricultural productivity.

The project showcases feasibility by leveraging existing Large Language Models (**Mixtral-8x7B**, **Zephyr-7B**) and integrating APIs (**OpenWeatherMap**, **Google Search Engine**).



# Key Features

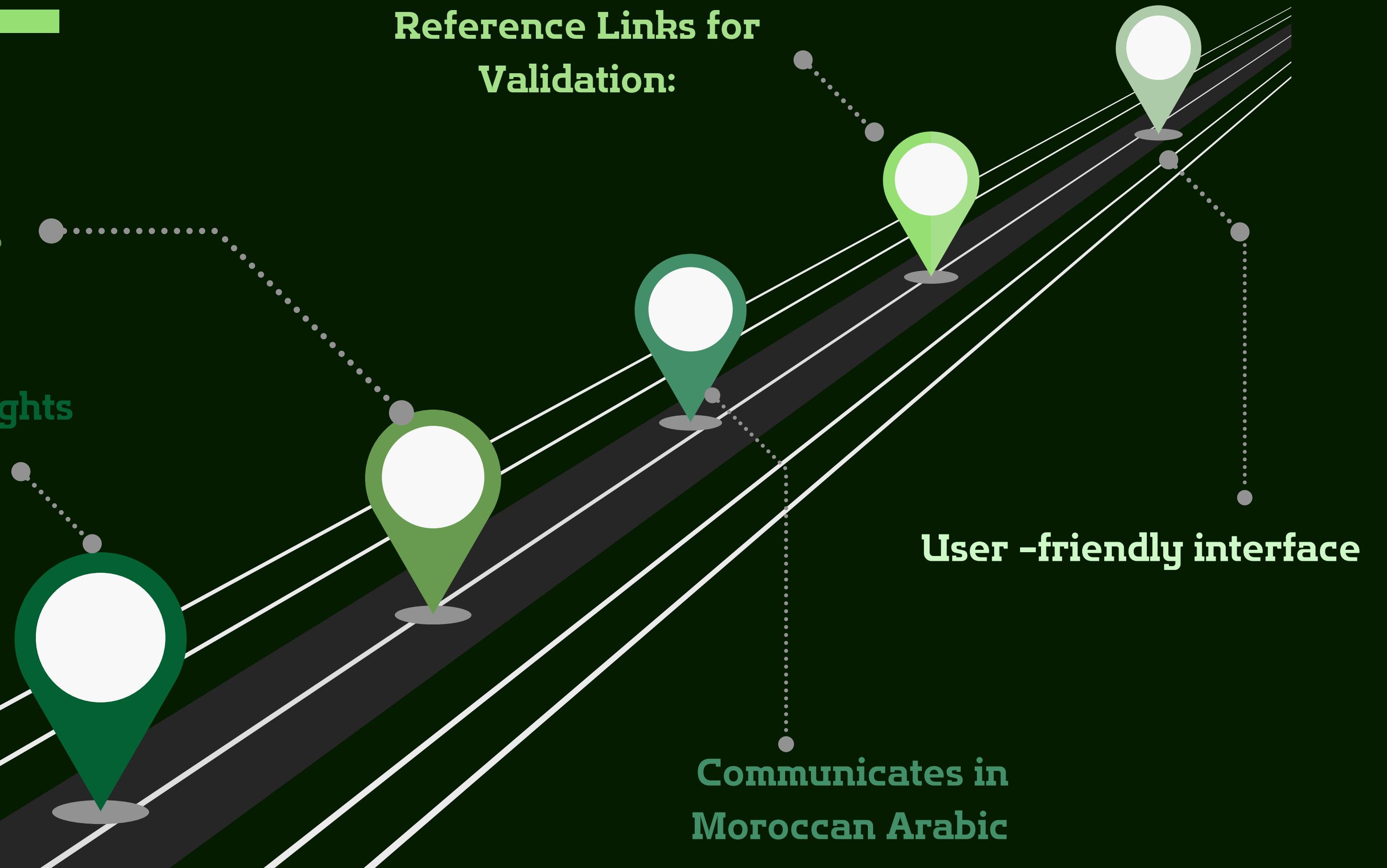
Customized  
Recommendations

Crop Insights

Reference Links for  
Validation:

Communicates in  
Moroccan Arabic

User -friendly interface





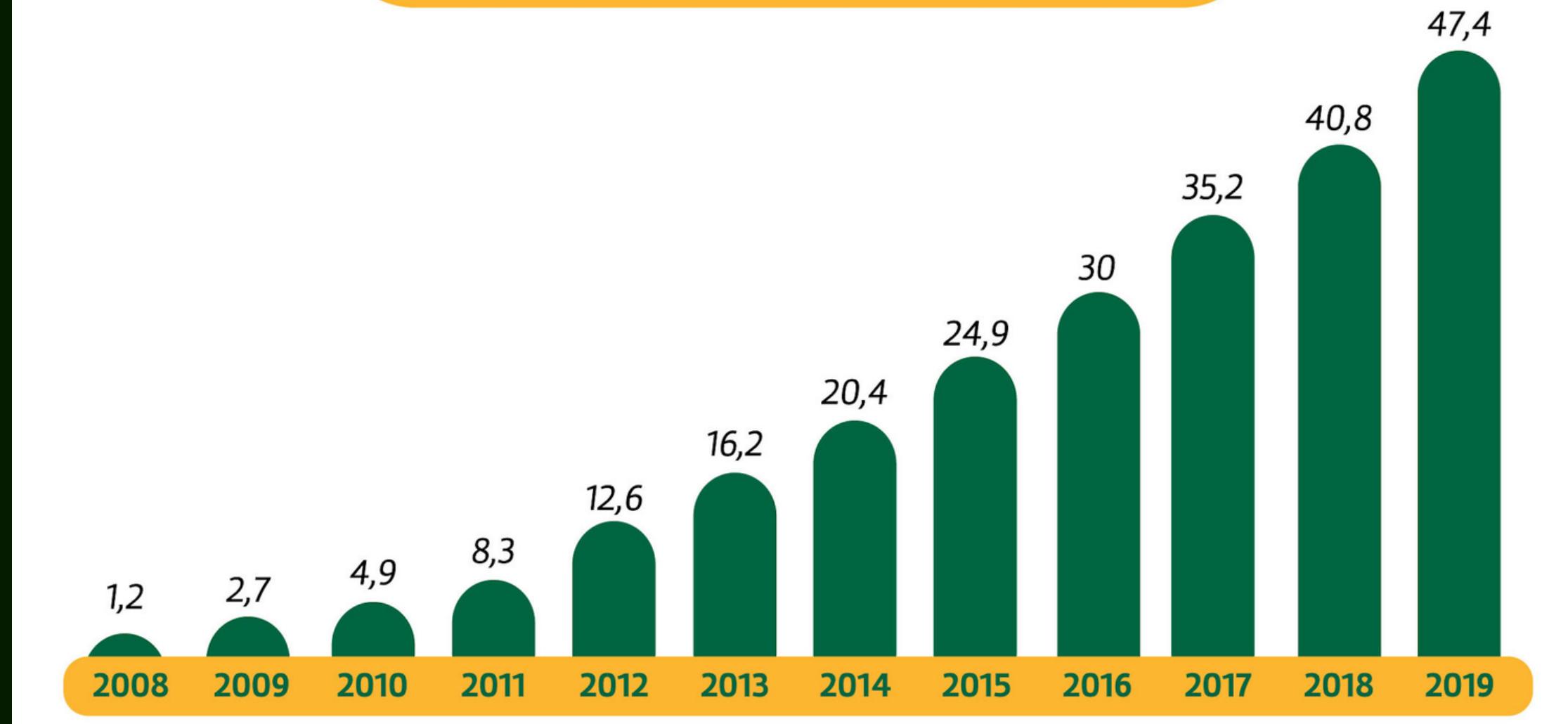
# Workflow



"PUBLIC INVESTMENT HAS SEEN A SIGNIFICANT INCREASE BETWEEN 2008 AND 2019. THUS, THE TOTAL PUBLIC INVESTMENTS OVER THIS PERIOD AMOUNT TO AROUND **47 BILLION DIRHAMS.**"

SOURCE:MINISTRY OF AGRICULTURE - MOROCCO

*Investissements publics  
(en millions de dirhams)*



## **FREEMIUM MODEL:**

PROVIDE BASIC FEATURES FOR FREE AND OFFER A PREMIUM VERSION WITH EXTRA FUNCTIONALITIES, CATERING TO A BROAD USER BASE WHILE ENTICING PREMIUM SUBSCRIPTIONS.

## **API ACCESS FOR DEVELOPERS:**

OFFER SMART فلاح'S API TO DEVELOPERS FOR A FEE, ENABLING INTEGRATION INTO THIRD-PARTY APPLICATIONS AND FOSTERING REVENUE FROM DEVELOPER PARTNERSHIPS.



Smart  
فلاحة



”الارض عطيها تعطيك..”  
-ناس زمان-

# AI ETHICS

## DATA PROTECTION

The chatbot respects privacy by incorporating features that utilize minimal user data (e.g., region) solely for providing agricultural insights.

## TRANSPARENCY

The chatbot's provision of insights, coupled with the ability to suggest reference links, contributes to transparency by offering users clear explanations and justifications for the recommendations provided.

## INCLUSIVITY

Design the chatbot to use accessible language (Moroccan Arabic) and ensure an intuitive user interface.

-  INTEGRATE A SPEECH TO TEXT MODEL IN MOROCCAN DARIJA  
DEDICATED TO MOROCCAN FARMERS
  
-  REAL-TIME AGRICULTURE NEWS DETECTION (FROM ARTICLES/SOCIAL MEDIA...)
  
-  BUILD A MULTIMODAL LLM CAPABLE OF ANALYSING IMAGES OF CROPS/PLANTS...

# MEET Our Team



**Marwa EL Kamil**

4th year student  
majoring in Artificial Intelligence



**Mohammed Machrouh**

Final year student  
majoring in Artificial Intelligence



**Khadija Bayoud**

Final year student  
majoring in Artificial Intelligence

"يد الفلاح نقية" - **Unknown Fella7**



Smart  
القدس



# THANK YOU!

We're just getting started!