A.Basic prompt templates

- 1. Explain farming in simple terms
- 2. Summarize the following text in Table format:

Prepare the land (by plowing or digging the soil)

Plant seeds

Water the crops

Protect them from pests

Harvest the food when it's ready

Take care of animals by feeding and cleaning them

- 3. Rewrite the sentence in your own words: Farming means growing plants (called crops) and raising animals to produce food and other useful things
- 4. what is the meaning of raising animals
- 5. Compare organic Farming and inorganic farming based on healthy lifestyle
- B. Persona based templates
 - 6. You are farmer. Explain how to do farming to a beginner
 - 7. Write like Mahesh babu. Why Organic farming is evolving our lifestyle
 - 8. You are a farmer. Write a checklist to make a farm ready for cultivation
- C. Few shot prompt Templates
 - 9. Classification:

Crop Farming - Growing plants like rice, wheat, vegetables, fruits

Animal Farming (Livestock) - Raising cows, goats, chickens for milk, meat, eggs
Mixed Farming - Both crops and animals are raised
Horticulture - Growing fruits, vegetables, flowers

10. Translate the sentence in to tamil language 👍

Why farming is important in future —> எதிர்காலத்தில் விவசாயம் ஏன் முக்கியமானது?

11. Answer these question

Who is the father of Green revolution - M .S.Swaminathan
Who discovered zero budget farming - prakash palekkar
Who started following organic farming earlier after green revolution

D. Chain of thought templates:

- 12. Many farmers face declining crop yields due to overuse of chemical fertilizers. This depletes soil health over time. To solve this, integrate organic compost and crop rotation. These restore nutrients naturally, improving soil fertility and yield sustainably. Healthy soil leads to healthy crops, securing long-term productivity and farmer income.
- 13. Tomato plants showed yellowing leaves and stunted growth. I checked soil—high acidity, poor drainage. Then examined weather—excess rainfall. Suspected root rot. To fix it, I improved drainage, added lime to balance pH, and applied organic fungicide. Within weeks, plant health improved. Diagnosis plus targeted action saved the crop.
- 14. Rice plants turned brown too early. Not drought—it rained well. No pests seen. I tested water—high salt levels found. Puzzle solved: nearby borewell leaked saline water into irrigation. I switched to rainwater harvesting and gypsum treatment. The crop recovered. Careful observation and step-by-step reasoning revealed the hidden cause.

E. Instruction tuning / Formatting control

15. Identify the key farming challenges discussed in the article and summarize them in 5 bullet points

- 16. Create a table comparing organic farming, conventional farming, and hydroponic farming based on criteria such as soil use, water consumption, cost, yield, and environmental impact.
- 17. Write a professional email to a local agricultural officer requesting assistance with implementing drip irrigation on a small farm. Use a formal tone and clearly state the purpose and expected support.

F. Contextual prompts

- 18. Explain precision farming to a high school student who understands basic environmental science and technology
- 19. As an industry expert, explain how drone technology is transforming modern agriculture, especially in crop monitoring, spraying, and precision farming

G. Creative writing prompt.

- 20. Write a story about Ravi, a young farmer who wants to switch to organic farming but faces resistance from his community and struggles with low initial yields
- 21. Write a poem in the style of a folk song about the beauty and struggles of a farmer's life
- 22. Write a realistic dialogue between a young farmer and an agricultural expert discussing the benefits and challenges of switching to organic farming

H. Code & Technical prompts

- 23. Write a Python function to calculate the total water needed for a farm based on the number of crops and water required per crop
- 24. Here is python code. Find and fix any errors:

```
def calculate_total_water(num_crops, water_per_crop_liters):
```

Calculate total water needed for a farm.

Parameters:

```
num_crops (int): Number of crops on the farm. water_per_crop_liters (float): Water required per crop in liters.
```

Returns:

```
float: Total water needed in liters.

"""

total_water = num_crops * water_per_crop_liters
return total_water

# Example usage:
number_of_crops = 500
water_required_per_crop = 2.5 # in liters

total_water_needed = calculate_total_water(number_of_crops, water_required_per_crop)
print(f"Total water needed: {total_water_needed} liters")
```

25. Explain how to use a weather API to get real-time rainfall data for a farm location, with an example of the API request and response

I. Marketing & Business prompts

- 26. Write a compelling ad for an organic fertilizer brand, targeting small and medium-scale farmers who want to improve soil health and crop yield naturally
- 27. Write a persuasive product description for a solar-powered irrigation pump designed for small farms in rural areas
- 28. Create a social media post promoting a local organic farmers' market in a friendly and engaging tone

J. Customer support & Service prompts

- 29. "Respond professionally to this customer complaint: 'The organic fertilizer I purchased didn't show any visible results after two weeks of use"
- 30. Generate 5 FAQs and answers about starting an organic vegetable farm for beginners.

K. Education and tutoring prompts

- 31. Create a lesson plan for teaching fifth-grade students about the basics of crop farming, including soil, seeds, and the importance of sunlight and water
- 32. Generate a 5-question quiz about sustainable farming practices for middle school students
- 33. Explain how to solve the problem of pest infestation in vegetable crops using eco-friendly methods

 L. Advanced framework based templat 	L.	Advanced	framework	based	template
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34. "Using the React framework, simulate an intelligent farm assistant that helps a user decide which crop to plant based on soil type, rainfall, and season."

Thought:

The assistant needs to consider environmental factors (soil, rainfall, season) and match them with suitable crops. It must simulate reasoning like an expert farmer would.

Action:

Build a React app where the user selects:

- Soil type (e.g., clay, loamy, sandy)
- Current season (e.g., Kharif, Rabi)
- Average rainfall level (e.g., low, medium, high)

The app then filters and recommends a crop based on predefined logic.

Observation:

User selects loamy soil, Kharif season, and medium rainfall.

The app checks its internal knowledge: "Loamy + Kharif + Medium Rainfall → Best crop: Rice or Maize."

Answer:

"Based on your conditions, Rice and Maize are the best choices to grow this season."

35. Generate 3 possible solutions to reduce water usage in crop farming. Evaluate them based on cost, efficiency, and ease of use. Choose the best one and explain why.

36. You are an expert in farming. Solve the following question in 4 different ways and pick the most consistent answer:

What is the most efficient method to improve soil fertility on a small organic farm? Consider composting, green manure, crop rotation, and biofertilizers. Use different reasoning approaches for each method and identify the most consistent and practical solution

- M. Prompt optimization
- 37. Improve this prompt "You are an expert in farming. Solve the following question in 4 different ways and pick the most consistent answer:

What is the most efficient method to improve soil fertility on a small organic farm? Consider composting, green manure, crop rotation, and biofertilizers. Use different reasoning approaches for each method and identify the most consistent and practical solution"

Make it clear, specific and structured

38. Rate this output based on the following criteria:

Relevance:
Accuracy:
Clarity:
Fluency:
Creativity:

Final score :

- 39. Take this weak prompt "Explain how to solve the problem of pest infestation in vegetable crops using eco-friendly methods" Now rewrite it 5 times to improve clarity and effectiveness
- N. Real world application prompts
 - 40. You are an expert in farming. Write a job posting for the position of 'Farm Operations Manager' at a sustainable agriculture company. Clearly explain the key responsibilities, required qualifications, and the benefits offered to the candidate
 - 41. You are an expert in farming. Create a professional summary for a resume based on the following details: years of experience in agriculture, key farming skills (e.g., crop management, irrigation, pest control), and major achievements (e.g., increased yield, implemented organic practices, trained farm workers)

42. Write a project proposal for a client who wants to convert their conventional farm into an organic farm. Include clear objectives, detailed methodology (steps for conversion), and expected benefits such as improved soil health, better market value, and environmental impact

O. Miscellaneous useful templates

- 43. You are an expert in farming. Write an opinion piece on the importance of farm subsidies for small and marginal farmers. Use persuasive arguments, economic reasoning, and real-life examples to support your perspective
- 44. Prepare arguments for both sides of the debate on the topic: 'Should government continue providing subsidies for chemical fertilizers?'. Present strong points in favor and against, including environmental, economic, and productivity perspectives
- 45. Plan a 5-day agri-tourism trip to a rural farming village for eco-conscious travelers. Include daily activities (like harvesting, organic cooking, and local farm tours), estimated budget, and practical tips for a meaningful and sustainable experience.
- 46. Write a review for the documentary *'Kiss the Ground'* (or any farming-related book/movie). Include a brief summary, strengths (e.g., educational value, visuals), weaknesses (e.g., bias, depth), and your recommendation for who should watch or read it and why
- 47. Give me actionable advice on how to transition from conventional to organic farming. Include specific daily habits (e.g., composting, record-keeping) and mindset shifts (e.g., long-term thinking, patience with yield changes) needed for a successful and sustainable transition

P. Prompt chaining

48. Complete the following multi-step research task:

Step 1:

Identify the top 5 causes of climate change that directly impact agriculture (e.g., greenhouse gas emissions, deforestation, excessive fertilizer use, etc.).

Step 2:

Based on these causes, suggest 5 practical, farm-level solutions that farmers can adopt to reduce their climate impact and build resilience (e.g., conservation tillage, agroforestry, crop rotation).

49. Complete the following task from idea to execution:

Step 1:

Generate 5 business ideas for eco-friendly agricultural products or services (e.g., organic compost, solar-powered tools, biodegradable seedling trays).

Step 2:

Pick one idea and develop a detailed marketing strategy for it, including:

- Target audience
- Unique selling points
- Promotion channels (e.g., social media, farm expos, local markets)
- Pricing and distribution approach
 50.

Role:

You are an expert in sustainable and organic farming with years of hands-on experience guiding farmers through successful agricultural transitions.

Task:

Provide actionable advice on how to transition from conventional to organic farming, focusing on both daily habits and mindset shifts that support long-term sustainability and productivity.

Context:

Many small and medium-scale farmers want to shift to organic farming due to health, environmental, and market benefits. However, they often struggle with where to start, what to change daily, and how to stay motivated during early challenges like lower yields or unfamiliar practices.

Few-shots (Examples):

- Daily habit: Begin composting kitchen and farm waste to build nutrient-rich organic fertilizer.
- Daily habit: Keep a farm journal to record crop health, weather, pest sightings, and input usage.
- Mindset shift: Shift from quick results to long-term soil and crop health.

• Mindset shift: View early yield drops as an investment in future sustainability.

Report:

Organize your response into two sections:

- 1. **Daily Habits to Adopt** List and explain 3–5 practical daily routines farmers can begin immediately.
- 2. **Mindset Shifts Required** Describe key changes in thinking or approach necessary for a smooth and successful transition.

End with a brief motivational note or success tip for new organic farmers.