**Crop Price & Market APIs**

| **API Name** | **Base URL / Docs** | **Requires API Key?** | **Sample Use** |
| --- | --- | --- | --- |
| **Agmarknet (India Govt)** | https://data.gov.in/resources/agmarknet | ✅ Yes (from data.gov.in) | Daily mandi prices by crop, market, state |
| Example: | https://api.data.gov.in/resource/XXX?api-key=YOUR\_API\_KEY&format=json | ✅ | GET crop rates by region |

**Weather Forecast APIs**

| **API Name** | **Free or Paid** | **Details** |
| --- | --- | --- |
| **OpenWeatherMap** | ✅ **Free Tier** | Free: 1,000 calls/day. Paid plans available if you need more. Pricing |
| **WeatherAPI** | ✅ **Free Tier** | Free: 1 million calls/month. Paid tiers after that. Pricing |
| **Visual Crossing Weather** | ✅ **Free Tier** | Free for 1,000 results/day. CSV export allowed. Paid plans optional. |
| **IMD (India)** | ✅ **Free (Manual)** | No public API. Data is available as PDFs/CSV manually via https://mausam.imd.gov.in |

**Required Free APIs – Project-Wise**

| **Use Case** | **API Name** | **Base URL / Docs** | **Free Limit** |
| --- | --- | --- | --- |
| **Crop Prices (India)** | Agmarknet API | data.gov.in/agmarknet | ✅ Unlimited |
| **Weather Forecasting** | OpenWeatherMap | openweathermap.org | ✅ 1,000 calls/day |
| **Route Optimization** | Mapbox Directions API | mapbox.com | ✅ 50,000/month |
| **Push Notifications** | Firebase Messaging | firebase.google.com | ✅ Unlimited |
| **Multilingual Support** | LibreTranslate | libretranslate.com | ✅ Unlimited |
| **SMS Alerts** (India) | Fast2SMS *(optional)* | [fast2sms.com](https://www.fast2sms.com) | ✅ 50 SMS/day |

.env Sample (API Keys)

# Weather API

OPENWEATHER\_API\_KEY=your\_openweather\_key

# Crop Price (Gov)

AGMARKNET\_API\_KEY=your\_data\_gov\_key

# Routing

MAPBOX\_API\_KEY=your\_mapbox\_key

# Firebase

FCM\_SERVER\_KEY=your\_firebase\_key

# SMS

FAST2SMS\_API\_KEY=your\_fast2sms\_key