YCD Plant Health App

Deployment Costs & Financial Projections

All amounts in FCFA (1 USD = 600 FCFA)

February 10, 2026

1. What It Costs to Start

The YCD App is ready to deploy. Below is the exact cost to publish the app on Google Play Store, host the backend on Railway, and run the database on Neon PostgreSQL.

Item	Cost (FCFA)	Type
Google Play Developer Account	15,000 FCFA	One-time (lifetime)
Railway — Backend Hosting (Hobby Plan)	3,000 FCFA/month	Monthly
Neon PostgreSQL — Database	0 FCFA	Free tier
Groq API — AI Chatbot + Voice Transcription	0 FCFA	Free tier
Expo / EAS — App Build Service	0 FCFA	Free tier
Cloudinary — Image Storage	0 FCFA	Free tier
Brevo — Email Service	0 FCFA	Free tier

Total to launch (first month)	**18,000 FCFA**
Ongoing monthly cost	**3,000 FCFA/month**

2. Free Tier Limits

Most services start free. Below are the limits and how many users they support before an upgrade is needed.

Service	Free Tier Limit	Users Supported
Neon Database	0.5 GB storage, 190 compute hours/month	~5,000
Groq AI	14,400 requests/day, 6,000 tokens/min	~2,000 daily active
Cloudinary	25 GB storage, 25,000 transforms/month	~10,000
Brevo Email	300 emails/day	~5,000
Expo/EAS Builds	30 builds/month	Unlimited app users

Free tiers comfortably support 2,000 to 5,000 users before any upgrades are needed.

3. Yearly Subscription Costs to Pay

Below are the actual yearly expenses you need to pay to keep the app running. These are the subscription costs for each service.

Service	Monthly Plan	Yearly Cost (FCFA)
Railway — Backend Hosting	3,000 FCFA/month	36,000 FCFA/year
Neon PostgreSQL — Database	0 FCFA (free tier)	0 FCFA/year
Groq API — AI Services	0 FCFA (free tier)	0 FCFA/year
Cloudinary — Image Storage	0 FCFA (free tier)	0 FCFA/year
Brevo — Email Service	0 FCFA (free tier)	0 FCFA/year
Expo / EAS — Build Service	0 FCFA (free tier)	0 FCFA/year
Domain Name (optional)	600 FCFA/month	7,200 FCFA/year
TOTAL YEARLY SUBSCRIPTIONS		**43,200 FCFA/year**

Add 15,000 FCFA one-time for Google Play Store registration in the first year only.

FIRST YEAR TOTAL EXPENSE	
Google Play registration (one-time)	15,000 FCFA
Railway hosting (12 months x 3,000)	36,000 FCFA
Domain name (optional, 12 months x 600)	7,200 FCFA
All other services	0 FCFA (free)
TOTAL FIRST YEAR	**58,200 FCFA**

Note: Neon PostgreSQL is currently on the free tier (0.5 GB storage, 190 compute hours/month). If the number of users increases significantly beyond 5,000, the database will need to be upgraded to a paid plan. Neon Launch plan costs 11,400 FCFA/month (136,800 FCFA/year) for 10 GB storage. Neon Scale plan costs 41,400 FCFA/month (496,800 FCFA/year) for 50 GB storage. This upgrade will only be necessary when the app grows substantially.

4. Service Pricing Details

Railway (Backend Hosting)

Plan	Monthly (FCFA)	Yearly (FCFA)	Includes
Hobby (current)	3,000	36,000	8 GB RAM, auto-deploy
Pro	12,000	144,000	Team features, priority

Neon PostgreSQL (Database)

Plan	Monthly (FCFA)	Yearly (FCFA)	Storage
Free (current)	0	0	0.5 GB
Launch	11,400	136,800	10 GB
Scale	41,400	496,800	50 GB
Business	89,400	1,072,800	500 GB

Groq AI (Chatbot + Voice)

Model	Free Tier	Paid Price	Used For
Llama 3.1 8B	14,400 req/day	30 FCFA / 1M tokens	AI Chatbot
Whisper Large V3	2,000 req/day	67 FCFA / hour	Voice-to-text

Google Play Store

Item	Cost (FCFA)	Notes
Developer Account	15,000 (one-time)	Lifetime access, unlimited apps
Commission on sales	15%	Google takes 15% on first $1M revenue/year
App hosting	0	Free, unlimited downloads

Summary

TO START	
Google Play Store registration	15,000 FCFA (one-time)
Railway backend hosting	3,000 FCFA/month
Database, AI, images, email	0 FCFA (free tiers)
TOTAL FIRST MONTH	18,000 FCFA
YEARLY SUBSCRIPTION COSTS	
Railway hosting (12 months)	**36,000 FCFA/year**
Domain name (12 months)	7,200 FCFA/year
All other services	0 FCFA (free tiers)
TOTAL FIRST YEAR (+ Play Store)	58,200 FCFA
TOTAL FOLLOWING YEARS	**43,200 FCFA/year**

The app can be deployed commercially for 18,000 FCFA the first month, then 3,000 FCFA/month ongoing. The total first year expense is 58,200 FCFA. Free tiers support thousands of users. If users grow significantly, Neon database will need an upgrade (from 136,800 FCFA/year).