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GREEN #PGC 2025 DAY 5

ESTIMATING THE AMOUNT OF WATER REQUIRED FOR EACH MAIN
INGREDIENT IN FRIED RICE

RICE



M


Rice, white

(Serving size: 4 ounces)

73 gallons per serving
276 liters per serving

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PLANTAIN



M

Plantains

(Serving size: 4 ounces)

48 gallons per serving
182 liters per serving

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EGGS



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Eggs, chicken

(Serving size: 4 ounces)

98 gallons per serving
371 liters per serving

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ONIONS



S

Onions

(Serving size: 4 ounces)

8 gallons per serving
30 liters per serving

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Ingredient	Quantity Used	Water Footprint (Gallons)
White Rice	~8 oz (½ lb)	146
Eggs (3)	~6 oz	98
Green Pepper	~4 oz	11
Onion	~4 oz	8
Spring Onion	~2 oz	~4 (<i>estimated</i>)
Vegetable Oil	~2 oz	~25 (<i>processing-intensive</i>)
Turmeric Powder	~1 oz	~10 (<i>imported</i>)
Ripe Plantain	~8 oz (½ lb)	48

- ✚ Total Water Footprint: approximately 350 gallons
- ✚ Per Person: approximately 175 gallons

A few simple substitutions that could make the meal more water-friendly

- ✚ Swap white rice brown rice, this lowers water use and boosts local sourcing.
- ✚ Replace eggs with cowpeas or lentils this is more water-efficient and climate-resilient.
- ✚ Using coconut oil from local producers instead of processed vegetable oil.

REFLECTION ON THE RESULT OF OUR WATER FOOTPRINT.

We made fried rice with eggs and plantain for two people, and how much water it takes to grow and produce the ingredients especially rice and eggs shocked us. When we realized that some people in Sub-Saharan Africa use only 2–5 gallons of water a day, it made us think twice. Our meal used over 350 gallons. This challenge helped me realize that every food choice affects water use. If we switch to local grains or beans, we can save water and support farmers near us. A small change makes a big difference.