

Understanding how to **convert between decimals, fractions, and percentages** is very useful in **disaster management**. It allows responders and planners to **communicate clearly, analyze data, and make quick, accurate decisions** — especially when dealing with statistics, resources, and budgeting.

Below are **real-life disaster management examples** for each type of conversion:

◆ 1. Changing a Decimal to a Fraction

✓ Example:

During an emergency food program, each person gets **0.75 kg of rice**.

$$0.75 = \frac{75}{100} = \frac{3}{4}$$

→ Each person receives **$\frac{3}{4}$ kg of rice** — easier to visualize or divide.

◆ 2. Changing a Fraction to a Decimal

✓ Example:

A tank is $\frac{5}{8}$ full of water.

$$\frac{5}{8} = 0.625$$

→ The tank is **62.5% full** (decimal form helps for digital meters).

◆ 3. Changing a Decimal to a Percentage

✓ Example:

Only **0.4** of a damaged area has been cleared so far.

$$0.4 \times 100 = 40\%$$

→ **40%** of the area is cleared — useful in progress reports and visual graphs.

◆ 4. Changing a Percentage to a Decimal

✓ Example:

An aid agency has distributed 85% of supplies.

$$85\% = \frac{85}{100} = 0.85$$

→ Can be used in formulas or calculations (e.g., 0.85×500 kits = 425 kits delivered).

◆ 5. Changing a Fraction to a Percentage

✓ Example:

Out of 20 villages, 15 received aid.

$$\frac{15}{20} = 0.75 \Rightarrow 0.75 \times 100 = 75\%$$

→ 75% of villages have received aid — for stakeholder updates.

◆ 6. Changing a Percentage to a Fraction

✓ Example:

A report says 60% of roads are still blocked.

$$60\% = \frac{60}{100} = \frac{3}{5}$$

→ Helps when dividing responsibilities: 3 out of every 5 roads need clearing.

Summary Table:

Situation	Conversion	Calculation	Result
Each person gets 0.75 kg rice	Decimal → Fraction	$0.75 = \frac{3}{4}$	$\frac{3}{4}$ kg
Tank is $\frac{5}{8}$ full	Fraction → Decimal	$5 \div 8 = 0.625$	0.625
0.4 of area cleared	Decimal → %	0.4×100	40%
85% of aid delivered	% → Decimal	$85 \div 100$	0.85
15 of 20 villages served	Fraction → %	$15 \div 20 \times 100$	75%
60% roads blocked	% → Fraction	$60 \div 100 = \frac{3}{5}$	$\frac{3}{5}$

Why These Conversions Matter in Disaster Management:

- **Percentages** help with **progress tracking**, reporting, and budgeting.
- **Fractions** help with **fair sharing** of resources.
- **Decimals** work well with **calculations** in spreadsheets or digital tools.